

References

1. Kaminski-Hartenthaler A, Meerpohl JJ, Gartlehner G, et al. [GRADE guidelines: 14. Going from evidence to recommendations: the significance and presentation of recommendations]. *Z Evid Fortbild Qual Gesundheitswes.* 2014;108(7):413-20. GRADE Leitlinien: 14. Von der Evidenz zur Empfehlung: Die Bedeutung und Darstellung von Empfehlungen. doi:10.1016/j.zefq.2014.08.003
2. Drucker AM, Morra DE, Prieto-Merino D, et al. Systemic Immunomodulatory Treatments for Atopic Dermatitis: Update of a Living Systematic Review and Network Meta-analysis. *JAMA Dermatol.* May 1 2022;158(5):523-532. doi:10.1001/jamadermatol.2022.0455
3. Drucker AM. Systemic immunomodulatory treatments for atopic dermatitis: a living systematic review and network meta-analysis. 06.07.2022, <https://eczematherapies.com/research/>
4. Silverberg JI, Simpson EL, Armstrong AW, de Bruin-Weller MS, Irvine AD, Reich K. Expert Perspectives on Key Parameters that Impact Interpretation of Randomized Clinical Trials in Moderate-to-Severe Atopic Dermatitis. *Am J Clin Dermatol.* Oct 26 2021;doi:10.1007/s40257-021-00639-y
5. Wollenberg A, Christen-Zäch S, Taieb A, et al. ETFAD/EADV Eczema task force 2020 position paper on diagnosis and treatment of atopic dermatitis in adults and children. *J Eur Acad Dermatol Venereol.* Dec 2020;34(12):2717-2744. doi:10.1111/jdv.16892
6. Schünemann H, Brożek J, Guyatt G, Oxman A. Handbook for grading the quality of evidence and the strength of recommendations using the GRADE approach. 03.08.2021, Accessed 03.08.2021, <https://gdt.gradepro.org/app/handbook/handbook.html>
7. Ring J, Zink A, Arents BWM, et al. Atopic eczema: burden of disease and individual suffering - results from a large EU study in adults. *J Eur Acad Dermatol Venereol.* Jul 2019;33(7):1331-1340. doi:10.1111/jdv.15634
8. Sackett DL, Rosenberg WM, Gray JA, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. *BMJ.* Jan 13 1996;312(7023):71-2. doi:10.1136/bmj.312.7023.71
9. Barbarot S, Stalder JF. Therapeutic patient education in atopic eczema. *Br J Dermatol.* Jul 2014;170 Suppl 1:44-8. doi:10.1111/bjd.12932
10. Arents BWM. Eczema treatment: it takes time to do no harm. *Br J Dermatol.* Sep 2017;177(3):613-614. doi:10.1111/bjd.15788
11. Andreassen TH, Christensen MO, Halling AS, Egeberg A, Thyssen JP. Placebo response in phase 2 and 3 trials of systemic and biological therapies for atopic dermatitis-a systematic review and meta-analysis. *J Eur Acad Dermatol Venereol.* Jun 2020;34(6):1143-1150. doi:10.1111/jdv.16163
12. Zink AGS, Arents BWM, Fink-Wagner A, et al. Out-of-pocket Costs for Individuals with Atopic Eczema: A Cross-sectional Study in Nine European Countries. *Acta Derm Venereol.* Mar 1 2019;99(3):263-267. doi:10.2340/00015555-3102
13. Langan SM, Irvine AD, Weidinger S. Atopic dermatitis. *Lancet.* Aug 1 2020;396(10247):345-360. doi:10.1016/S0140-6736(20)31286-1
14. Ring J. *Atopic dermatitis: eczema.* Springer; 2016.
15. Palmer CN, Irvine AD, Terron-Kwiatkowski A, et al. Common loss-of-function variants of the epidermal barrier protein filaggrin are a major predisposing factor for atopic dermatitis. *Nature genetics.* 2006;38(4):441-446.
16. Cork MJ, Danby SG, Vasilopoulos Y, et al. Epidermal barrier dysfunction in atopic dermatitis. *J Invest Dermatol.* Aug 2009;129(8):1892-908. doi:10.1038/jid.2009.133
17. Briot A, Deraison C, Lacroix M, et al. Kallikrein 5 induces atopic dermatitis-like lesions through PAR2-mediated thymic stromal lymphopoietin expression in Netherton syndrome. *J Exp Med.* May 11 2009;206(5):1135-47. doi:10.1084/jem.20082242
18. Draelos ZD. An evaluation of prescription device moisturizers. *J Cosmet Dermatol.* Mar 2009;8(1):40-3. doi:10.1111/j.1473-2165.2009.00422.x

19. Elias PM, Wakefield JS, Man MQ. Moisturizers versus Current and Next-Generation Barrier Repair Therapy for the Management of Atopic Dermatitis. *Skin Pharmacol Physiol*. 2019;32(1):1-7. doi:10.1159/000493641
20. Gelmetti C, Wollenberg A. Atopic dermatitis - all you can do from the outside. *Br J Dermatol*. Jul 2014;170 Suppl 1:19-24. doi:10.1111/bjd.12957
21. Wollenberg A, Schnopp C. Evolution of conventional therapy in atopic dermatitis. *Immunol Allergy Clin North Am*. Aug 2010;30(3):351-68. doi:10.1016/j.iac.2010.06.005
22. Abramovits W, Hebert AA, Boguniewicz M, et al. Patient-reported outcomes from a multicenter, randomized, vehicle-controlled clinical study of MAS063DP (Atopiclair) in the management of mild-to-moderate atopic dermatitis in adults. *J Dermatolog Treat*. 2008;19(6):327-32. doi:10.1080/09546630802232799
23. Boralevi F, Saint Aroman M, Delarue A, et al. Long-term emollient therapy improves xerosis in children with atopic dermatitis. *Journal of the European Academy of Dermatology and Venereology*. 01 Nov 2014;28(11):1456-1462.
24. Eberlein B, Eicke C, Reinhardt HW, Ring J. Adjuvant treatment of atopic eczema: assessment of an emollient containing N-palmitoylethanolamine (ATOPA study). *J Eur Acad Dermatol Venereol*. Jan 2008;22(1):73-82. doi:10.1111/j.1468-3083.2007.02351.x
25. Wilhelm K-P, Schölermann A, Bohnsack K, Wilhelm D, Rippke F. Wirksamkeit und Verträglichkeit einer topischen Zubereitung mit 10% Urea (Laceran® Salbe 10% Urea) bei Neurodermitis. *Aktuelle Dermatologie*. 1998;24(1-2):26-30.
26. Loden M, Andersson AC, Anderson C, et al. A double-blind study comparing the effect of glycerin and urea on dry, eczematous skin in atopic patients. *Acta Derm Venereol*. 2002;82(1):45-7. doi:10.1080/000155502753600885
27. Darsow U, Lübke J, Täieb A, et al. Position paper on diagnosis and treatment of atopic dermatitis. *J Eur Acad Dermatol Venereol*. May 2005;19(3):286-95. doi:10.1111/j.1468-3083.2005.01249.x
28. Wollenberg A, Barbarot S, Bieber T, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. *J Eur Acad Dermatol Venereol*. May 2018;32(5):657-682. doi:10.1111/jdv.14891
29. van Zuuren EJ, Fedorowicz Z, Christensen R, Lavrijsen A, Arents BWM. Emollients and moisturisers for eczema. Meta-Analysis

Research Support, Non-U.S. Gov't

Review

Systematic Review. *Cochrane Database Syst Rev*. 02 06 2017;2:CD012119.

doi:<https://dx.doi.org/10.1002/14651858.CD012119.pub2>

30. Schram ME, Spuls PI, Leeflang MM, Lindeboom R, Bos JD, Schmitt J. EASI, (objective) SCORAD and POEM for atopic eczema: responsiveness and minimal clinically important difference. *Allergy*. Jan 2012;67(1):99-106. doi:10.1111/j.1398-9995.2011.02719.x
31. Akerstrom U, Reitamo S, Langeland T, et al. Comparison of Moisturizing Creams for the Prevention of Atopic Dermatitis Relapse: A Randomized Double-blind Controlled Multicentre Clinical Trial. *Acta Derm Venereol*. May 2015;95(5):587-92. doi:10.2340/00015555-2051
32. Chiang C, Eichenfield LF. Quantitative assessment of combination bathing and moisturizing regimens on skin hydration in atopic dermatitis. *Pediatr Dermatol*. May-Jun 2009;26(3):273-8. doi:10.1111/j.1525-1470.2009.00911.x
33. Dinkloh A, Worm M, Geier J, Schnuch A, Wollenberg A. Contact sensitization in patients with suspected cosmetic intolerance: results of the IVDK 2006-2011. *J Eur Acad Dermatol Venereol*. Jun 2015;29(6):1071-81. doi:10.1111/jdv.12750

34. Mengeaud V, Phulpin C, Bacquey A, Boralevi F, Schmitt AM, Taieb A. An innovative oat-based sterile emollient cream in the maintenance therapy of childhood atopic dermatitis. *Pediatr Dermatol*. Mar-Apr 2015;32(2):208-15. doi:10.1111/pde.12464
35. Angelova-Fischer I, Rippke F, Richter D, et al. Stand-alone Emollient Treatment Reduces Flares After Discontinuation of Topical Steroid Treatment in Atopic Dermatitis: A Double-blind, Randomized, Vehicle-controlled, Left-right Comparison Study. *Acta Derm Venereol*. Apr 27 2018;98(5):517-523. doi:10.2340/00015555-2882
36. Wollenberg A, Barbarot S, Bieber T, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part I. *J Eur Acad Dermatol Venereol*. May 2018;32(5):657-682. doi:10.1111/jdv.14891
37. Wollenberg A, Barbarot S, Bieber T, et al. Consensus-based European guidelines for treatment of atopic eczema (atopic dermatitis) in adults and children: part II. *J Eur Acad Dermatol Venereol*. Jun 2018;32(6):850-878. doi:10.1111/jdv.14888
38. National Institute for Health and Care Excellence. NICE pathways: Eczema. 03.08.2021, 03.08.2021. <https://pathways.nice.org.uk/pathways/eczema>
39. Hlela C, Lunjani N, Gumede F, Kakande B, Khumalo NP. Affordable moisturisers are effective in atopic eczema: A randomised controlled trial. *S Afr Med J*. Sep 14 2015;105(9):780-4. doi:10.7196/SAMJnew.8331
40. Mandeau A, Aries MF, Boe JF, et al. Rhealba(R) oat plantlet extract: evidence of protein-free content and assessment of regulatory activity on immune inflammatory mediators. *Planta Med*. Jun 2011;77(9):900-6. doi:10.1055/s-0030-1250649
41. Gueniche A, Knautd B, Schuck E, et al. Effects of nonpathogenic gram-negative bacterium *Vitreoscilla filiformis* lysate on atopic dermatitis: a prospective, randomized, double-blind, placebo-controlled clinical study. *Br J Dermatol*. Dec 2008;159(6):1357-63. doi:10.1111/j.1365-2133.2008.08836.x
42. Aries MF, Hernandez-Pigeon H, Vaissiere C, et al. Anti-inflammatory and immunomodulatory effects of *Aquaphilus dolomiae* extract on in vitro models. *Clin Cosmet Investig Dermatol*. 2016;9:421-434. doi:10.2147/CCID.S113180
43. Bamford JT, Ray S, Musekiwa A, van Gool C, Humphreys R, Ernst E. Oral evening primrose oil and borage oil for eczema. *Cochrane Database Syst Rev*. Apr 30 2013;2013(4):Cd004416. doi:10.1002/14651858.CD004416.pub2
44. Gehring W, Bopp R, Rippke F, Gloor M. Effect of topically applied evening primrose oil on epidermal barrier function in atopic dermatitis as a function of vehicle. *Arzneimittelforschung*. Jul 1999;49(7):635-42. doi:10.1055/s-0031-1300475
45. Simpson EL, Chalmers JR, Hanifin JM, et al. Emollient enhancement of the skin barrier from birth offers effective atopic dermatitis prevention. *J Allergy Clin Immunol*. Oct 2014;134(4):818-23. doi:10.1016/j.jaci.2014.08.005
46. Horimukai K, Morita K, Narita M, et al. Application of moisturizer to neonates prevents development of atopic dermatitis. *J Allergy Clin Immunol*. Oct 2014;134(4):824-830 e6. doi:10.1016/j.jaci.2014.07.060
47. Chalmers JR, Haines RH, Bradshaw LE, et al. Daily emollient during infancy for prevention of eczema: the BEEP randomised controlled trial. Multicenter Study Randomized Controlled Trial. *Lancet*. 03 21 2020;395(10228):962-972. doi:[https://dx.doi.org/10.1016/S0140-6736\(19\)32984-8](https://dx.doi.org/10.1016/S0140-6736(19)32984-8)
48. Skjerven HO, Rehbinder EM, Vettukattil R, et al. Skin emollient and early complementary feeding to prevent infant atopic dermatitis (PreventADALL): a factorial, multicentre, cluster-randomised trial. *Lancet*. Mar 21 2020;395(10228):951-961. doi:10.1016/s0140-6736(19)32983-6
49. Wollenberg A, Wetzal S, Burgdorf WH, Haas J. Viral infections in atopic dermatitis: pathogenic aspects and clinical management. *J Allergy Clin Immunol*. Oct 2003;112(4):667-74. doi:10.1016/j.jaci.2003.07.001

50. Fonacier LS, Aquino MR. The role of contact allergy in atopic dermatitis. *Immunol Allergy Clin North Am*. Aug 2010;30(3):337-50. doi:10.1016/j.iac.2010.06.001
51. Thyssen JP, Linneberg A, Engkilde K, Menne T, Johansen JD. Contact sensitization to common haptens is associated with atopic dermatitis: new insight. *Br J Dermatol*. Jun 2012;166(6):1255-61. doi:10.1111/j.1365-2133.2012.10852.x
52. Misery L, Belloni Fortina A, El Hachem M, et al. A position paper on the management of itch and pain in atopic dermatitis from the International Society of Atopic Dermatitis (ISAD)/Oriented Patient-Education Network in Dermatology (OPENED) task force. *J Eur Acad Dermatol Venereol*. Apr 2021;35(4):787-796. doi:10.1111/jdv.16916
53. Ring J, Mohrenschrager M. Allergy to peanut oil--clinically relevant? *J Eur Acad Dermatol Venereol*. Apr 2007;21(4):452-5. doi:10.1111/j.1468-3083.2006.02133.x
54. Uehara M, Takada K. Use of soap in the management of atopic dermatitis. *Clin Exp Dermatol*. Sep 1985;10(5):419-25. doi:10.1111/j.1365-2230.1985.tb00598.x
55. Blume-Peytavi U, Cork MJ, Faergemann J, Szczapa J, Vanaclocha F, Gelmetti C. Bathing and cleansing in newborns from day 1 to first year of life: recommendations from a European round table meeting. *J Eur Acad Dermatol Venereol*. Jul 2009;23(7):751-9. doi:10.1111/j.1468-3083.2009.03140.x
56. Koutroulis I, Pyle T, Kopylov D, Little A, Gaughan J, Kratimenos P. The Association Between Bathing Habits and Severity of Atopic Dermatitis in Children. *Clin Pediatr (Phila)*. Feb 2016;55(2):176-81. doi:10.1177/0009922815594346
57. Denda M, Sokabe T, Fukumi-Tominaga T, Tominaga M. Effects of skin surface temperature on epidermal permeability barrier homeostasis. *J Invest Dermatol*. Mar 2007;127(3):654-9. doi:10.1038/sj.jid.5700590
58. Hua T, Yousaf M, Gwillim E, et al. Does daily bathing or showering worsen atopic dermatitis severity? A systematic review and meta-analysis. *Arch Dermatol Res*. Nov 16 2020;doi:10.1007/s00403-020-02164-0
59. Ring J, Alomar A, Bieber T, et al. Guidelines for treatment of atopic eczema (atopic dermatitis) Part II. *J Eur Acad Dermatol Venereol*. Sep 2012;26(9):1176-93. doi:10.1111/j.1468-3083.2012.04636.x
60. Koutroulis I, Petrova K, Kratimenos P, Gaughan J. Frequency of bathing in the management of atopic dermatitis: to bathe or not to bathe? *Clin Pediatr (Phila)*. Jun 2014;53(7):677-81. doi:10.1177/0009922814526980
61. Santer M, Ridd MJ, Francis NA, et al. Emollient bath additives for the treatment of childhood eczema (BATHE): multicentre pragmatic parallel group randomised controlled trial of clinical and cost effectiveness. Multicenter Study
Pragmatic Clinical Trial
Randomized Controlled Trial. *BMJ*. May 03 2018;361:k1332.
doi:<https://dx.doi.org/10.1136/bmj.k1332>
62. Maarouf M, Hendricks AJ, Shi VY. Bathing Additives for Atopic Dermatitis - A Systematic Review. *Dermatitis*. May/June 2019;30(3):191-197. doi:10.1097/der.0000000000000459
63. Ludwig G. On the topical effect of sea water tub-baths with and without addition of an oil emulsion. *Zeitschrift fur Haut-und Geschlechtskrankheiten*. 1968;43(16):683-688.
64. Dittmar HC, Pflieger D, Schempp CM, Schopf E, Simon JC. [Comparison of balneophototherapy and UVA/B mono-phototherapy in patients with subacute atopic dermatitis]. *Hautarzt*. Sep 1999;50(9):649-53. Vergleichsstudie Solebader plus UVA/B versus UVA/B-Monotherapie bei Patienten mit subakuter atopischer Dermatitis. doi:10.1007/s001050050975
65. Wollenberg A, Oranje A, Deleuran M, et al. ETFAD/EADV Eczema task force 2015 position paper on diagnosis and treatment of atopic dermatitis in adult and paediatric patients. *J Eur Acad Dermatol Venereol*. May 2016;30(5):729-47. doi:10.1111/jdv.13599

66. Wollenberg A, Frank R, Kroth J, et al. Proactive therapy of atopic eczema – an evidence-based concept with a behavioral background. *J Dtsch Dermatol Ges* 2009. 2009;7: 117–121.
67. Wollenberg A, Ehmann LM. Long term treatment concepts and proactive therapy for atopic eczema. *Annals of dermatology*. Aug 2012;24(3):253-60. doi:10.5021/ad.2012.24.3.253
68. Schnopp C, Holtmann C, Stock S, et al. Topical steroids under wet-wrap dressings in atopic dermatitis--a vehicle-controlled trial. *Dermatology*. 2002;204(1):56-9.
69. Gonzalez-Lopez G, Ceballos-Rodriguez RM, Gonzalez-Lopez JJ, Feito Rodriguez M, Herranz-Pinto P. Efficacy and safety of wet wrap therapy for patients with atopic dermatitis: a systematic review and meta-analysis. Review. *Br J Dermatol*. Nov 08 2016;doi:10.1111/bjd.15165
70. Kohn LL, Kang Y, Antaya RJ. A randomized, controlled trial comparing topical steroid application to wet versus dry skin in children with atopic dermatitis (AD). *Journal of the American Academy of Dermatology*. Aug 2016;75(2):306-11. doi:10.1016/j.jaad.2016.04.060
71. Janmohamed SR, Oranje AP, Devillers AC, et al. The proactive wet-wrap method with diluted corticosteroids versus emollients in children with atopic dermatitis: A prospective, randomized, double-blind, placebo-controlled trial. *Journal of the American Academy of Dermatology*. Mar 31 2014;doi:10.1016/j.jaad.2014.01.898
72. Cadmus SD, Sebastian KR, Warren D, et al. Efficacy and patient opinion of wet-wrap dressings using 0.1% triamcinolone acetonide ointment vs cream in the treatment of pediatric atopic dermatitis: A randomized split-body control study. *Pediatric Dermatology*. 2019;36(4):437-441. doi:10.1111/pde.13830
73. Hanifin J, Gupta AK, Rajagopalan R. Intermittent dosing of fluticasone propionate cream for reducing the risk of relapse in atopic dermatitis patients. *Br J Dermatol*. Sep 2002;147(3):528-37.
74. Berth-Jones J, Damstra RJ, Golsch S, et al. Twice weekly fluticasone propionate added to emollient maintenance treatment to reduce risk of relapse in atopic dermatitis: randomised, double blind, parallel group study. *BMJ*. Jun 21 2003;326(7403):1367. doi:10.1136/bmj.326.7403.1367
75. Niedner R. Therapie mit systemischen Glukokortikoiden. *Hautarzt*. 2001;52:1062-71.
76. Barnes L, Kaya G, Rollason V. Topical corticosteroid-induced skin atrophy: a comprehensive review. *Drug Saf*. May 2015;38(5):493-509. doi:10.1007/s40264-015-0287-7
77. Van Der Meer JB, Glazenburg EJ, Mulder PG, Eggink HF, Coenraads PJ. The management of moderate to severe atopic dermatitis in adults with topical fluticasone propionate. The Netherlands Adult Atopic Dermatitis Study Group. *Br J Dermatol*. Jun 1999;140(6):1114-21.
78. Walsh P, Aeling JL, Huff L, Weston WL. Hypothalamus-pituitary-adrenal axis suppression by superpotent topical steroids. *Journal of the American Academy of Dermatology*. Sep 1993;29(3):501-3.
79. Davallow Ghajar L, Wood Heickman LK, Conaway M, Rogol AD. Low Risk of Adrenal Insufficiency After Use of Low- to Moderate-Potency Topical Corticosteroids for Children With Atopic Dermatitis. *Clinical Pediatrics*. 2019/04/01 2019;58(4):406-412. doi:10.1177/0009922818825154
80. Fishbein AB, Mueller K, Lor J, Smith P, Paller AS, Kaat A. Systematic Review and Meta-analysis Comparing Topical Corticosteroids With Vehicle/Moisturizer in Childhood Atopic Dermatitis. *Journal of Pediatric Nursing*. 2019/07/01/ 2019;47:36-43. doi:<https://doi.org/10.1016/j.pedn.2019.03.018>
81. Hengge UR. Topical Corticosteroids. In: Gaspari AA, Tying SK, eds. *Clinical and Basic Immunodermatology*. Springer London; 2008:561-577.
82. Draelos ZD, Feldman SR, Berman B, et al. Tolerability of Topical Treatments for Atopic Dermatitis. *Dermatology and Therapy*. 2019/03/01 2019;9(1):71-102. doi:10.1007/s13555-019-0280-7
83. Siklar Z, Bostanci I, Atli O, Dallar Y. An infantile Cushing syndrome due to misuse of topical steroid. *Pediatr Dermatol*. Sep-Oct 2004;21(5):561-3. doi:10.1111/j.0736-8046.2004.21508.x
84. Haeck IM, Rouwen TJ, Timmer-de Mik L, de Bruin-Weller MS, Bruijnzeel-Koomen CA. Topical corticosteroids in atopic dermatitis and the risk of glaucoma and cataracts. *Journal of the American Academy of Dermatology*. 2011/02/01/ 2011;64(2):275-281. doi:<https://doi.org/10.1016/j.jaad.2010.01.035>

85. Chan HH, Salmon JF. Glaucoma caused by topical corticosteroid application to the eyelids. *Medical Journal of Australia*. 2019;210(4):152-153.e1. doi:10.5694/mja2.50012
86. Sahni D, Darley CR, Hawk JLM. Glaucoma induced by periorbital topical steroid use – a rare complication. *Clinical and Experimental Dermatology*. 2004;29(6):617-619. doi:10.1111/j.1365-2230.2004.01610.x
87. Hajar T, Leshem YA, Hanifin JM, et al. A systematic review of topical corticosteroid withdrawal ("steroid addiction") in patients with atopic dermatitis and other dermatoses. *Journal of the American Academy of Dermatology*. Mar 2015;72(3):541-549 e2. doi:10.1016/j.jaad.2014.11.024
88. Queille C, Pommarede R, Saurat JH. Efficacy versus systemic effects of six topical steroids in the treatment of atopic dermatitis of childhood. *Pediatr Dermatol*. Jan 1984;1(3):246-53.
89. Charman C, Williams H. The use of corticosteroids and corticosteroid phobia in atopic dermatitis. *Clinics in dermatology*. May-Jun 2003;21(3):193-200.
90. Meurer M, Eichenfield LF, Ho V, Potter PC, Werfel T, Hultsch T. Addition of pimecrolimus cream 1% to a topical corticosteroid treatment regimen in paediatric patients with severe atopic dermatitis: a randomized, double-blind trial. *J Dermatolog Treat*. May 2010;21(3):157-66. doi:10.3109/09546630903410158
91. Stalder JF, Aubert H, Anthoine E, et al. Topical corticosteroid phobia in atopic dermatitis: International feasibility study of the TOPICOP score. *Allergy*. Nov 2017;72(11):1713-1719. doi:10.1111/all.13189
92. Aubert-Wastiaux H, Moret L, Le Rhun A, et al. Topical corticosteroid phobia in atopic dermatitis: a study of its nature, origins and frequency. *Br J Dermatol*. Oct 2011;165(4):808-14. doi:10.1111/j.1365-2133.2011.10449.x
93. Lee JY, Her Y, Kim CW, Kim SS. Topical Corticosteroid Phobia among Parents of Children with Atopic Eczema in Korea. *Annals of dermatology*. Oct 2015;27(5):499-506. doi:10.5021/ad.2015.27.5.499
94. Müller SM, Tomaschett D, Euler S, Vogt DR, Herzog L, Itin P. Topical Corticosteroid Concerns in Dermatological Outpatients: A Cross-Sectional and Interventional Study. *Dermatology*. 2016;232(4):444-52.
95. Carr WW. Topical calcineurin inhibitors for atopic dermatitis: review and treatment recommendations. *Paediatr Drugs*. 2013;15(4):303-310. doi:10.1007/s40272-013-0013-9
96. Norris DA. Mechanisms of action of topical therapies and the rationale for combination therapy. *Journal of the American Academy of Dermatology*. 2005/07/01/ 2005;53(1, Supplement):S17-S25. doi:<https://doi.org/10.1016/j.jaad.2005.04.027>
97. Ruzicka T, Bieber T, Schöpf E, et al. A short-term trial of tacrolimus ointment for atopic dermatitis. *N Engl J Med*. 1997;337:816-821.
98. Van Leent EJ, Graber M, Thurston M, Wagenaar A, Spuls PI, Bos JD. Effectiveness of the ascomycin macrolactam SDZ ASM 981 in the topical treatment of atopic dermatitis. *Arch Dermatol*. 1998;134:805-809.
99. Reitamo S, Wollenberg A, Schopf E, et al. Safety and efficacy of 1 year of tacrolimus ointment monotherapy in adults with atopic dermatitis. The European Tacrolimus Ointment Study Group. *Arch Dermatol*. Aug 2000;136(8):999-1006. doi:dst0016 [pii]
100. Meurer M, Folster-Holst R, Wozel G, et al. Pimecrolimus cream in the long-term management of atopic dermatitis in adults: a six-month study. *Dermatology*. 2002;205(3):271-7. doi:65863
101. Reitamo S, Van Leent EJ, Ho V, et al. Efficacy and safety of tacrolimus ointment compared with that of hydrocortisone acetate ointment in children with atopic dermatitis. *J Allergy Clin Immunol*. 2002;109(3):539-46.
102. Cury Martins J, Martins C, Aoki V, Gois AF, Ishii HA, da Silva EM. Topical tacrolimus for atopic dermatitis. Research Support, Non-U.S. Gov't
- Review. *Cochrane Database Syst Rev*. Jul 01 2015;(7):CD009864. doi:10.1002/14651858.CD009864.pub2

103. Chen SL, Yan J, Wang FS. Two topical calcineurin inhibitors for the treatment of atopic dermatitis in pediatric patients: a meta-analysis of randomized clinical trials. *J Dermatolog Treat.* May 2010;21(3):144-56. doi:10.3109/09546630903401470
104. Wollenberg A, Reitamo S, Atzori F, et al. Proactive treatment of atopic dermatitis in adults with 0.1% tacrolimus ointment. *Allergy.* Jun 2008;63(6):742-50.
105. Thaci D, Reitamo S, Gonzalez Ensenat MA, et al. Proactive disease management with 0.03% tacrolimus ointment for children with atopic dermatitis: results of a randomized, multicentre, comparative study. *Br J Dermatol.* Sep 6 2008;159(6):1348-56.
106. Ho VC, Gupta A, Kaufmann R, et al. Safety and efficacy of nonsteroid pimecrolimus cream 1% in the treatment of atopic dermatitis in infants. *J Pediatr.* Feb 2003;142(2):155-62.
107. Eichenfield LF, Lucky AW, Boguniewicz M, et al. Safety and efficacy of pimecrolimus (ASM 981) cream 1% in the treatment of mild and moderate atopic dermatitis in children and adolescents. *Journal of the American Academy of Dermatology.* 2002;46:495-504.
108. Patel RR, Vander Straten MR, Korman NJ. The safety and efficacy of tacrolimus therapy in patients younger than 2 years with atopic dermatitis. *Arch Dermatol.* Sep 2003;139(9):1184-6. doi:10.1001/archderm.139.9.1184
109. Reitamo S, Mandelin J, Rubins A, et al. The pharmacokinetics of tacrolimus after first and repeated dosing with 0.03% ointment in infants with atopic dermatitis. *International journal of dermatology.* Apr 2009;48(4):348-55. doi:10.1111/j.1365-4632.2009.03853.x
110. Abędź N, Pawliczak R. Efficacy and safety of topical calcineurin inhibitors for the treatment of atopic dermatitis: meta-analysis of randomized clinical trials. *Postepy dermatologii i alergologii.* Dec 2019;36(6):752-759. doi:10.5114/ada.2019.91425
111. Reitamo S, Rustin M, Harper J, et al. A 4-year follow-up study of atopic dermatitis therapy with 0.1% tacrolimus ointment in children and adult patients. *Br J Dermatol.* Sep 2008;159(4):942-51.
112. Sigurgeirsson B, Boznanski A, Todd G, et al. Safety and efficacy of pimecrolimus in atopic dermatitis: a 5-year randomized trial. Comparative Study

Multicenter Study

Randomized Controlled Trial

Research Support, Non-U.S. Gov't. *Pediatrics.* Apr 2015;135(4):597-606. doi:10.1542/peds.2014-1990

113. Reitamo S, Rissanen J, Remitz A, et al. Tacrolimus ointment does not affect collagen synthesis: Results of a single-center randomized trial. *J Invest Dermatol.* 1998;111:396-398.
114. Queille-Roussel C, Paul C, Duteil L, et al. The new topical ascomycin derivative SDZ ASM 981 does not induce skin atrophy when applied to normal skin for 4 weeks: a randomized, double-blind controlled study. *Br J Dermatol.* 2001;144:507-13.
115. Hong CH, Gooderham M, Bissonnette R. Evidence Review of Topical Calcineurin Inhibitors for the Treatment of Adult Atopic Dermatitis. *Journal of cutaneous medicine and surgery.* Sep/Oct 2019;23(4_suppl):5s-10s. doi:10.1177/1203475419857669
116. Mandelin JM, Remitz A, Virtanen HM, Malmberg LP, Haahtela T, Reitamo S. A 10-year open follow-up of eczema and respiratory symptoms in patients with atopic dermatitis treated with topical tacrolimus for the first 4 years. *J Dermatolog Treat.* May 2010;21(3):167-70. doi:10.3109/09546630903493329
117. Lubbe J. Secondary infections in patients with atopic dermatitis. *Am J Clin Dermatol.* 2003;4(9):641-54.
118. Wetzel S, Wollenberg A. Eczema molluscatum in tacrolimus treated atopic dermatitis. *Eur J Dermatol.* 2004;14(1):73-74.
119. Wahn U, Bos JD, Goodfield M, et al. Efficacy and safety of pimecrolimus cream in the long-term management of atopic dermatitis in children. *Pediatrics.* Jul 2002;110(1 Pt 1):e2.
120. Bornhovd E, Wollenberg A. Topische Immunmodulatoren zur Ekzembehandlung. *Allergo J* 2003;12:456-462.

121. Reitamo S, Ortonne JP, Sand C, et al. A multicentre, randomized, double-blind, controlled study of long-term treatment with 0.1% tacrolimus ointment in adults with moderate to severe atopic dermatitis. *Br J Dermatol*. Jun 2005;152(6):1282-9. doi:10.1111/j.1365-2133.2005.06592.x
122. Ohtsuki M, Morimoto H, Nakagawa H. Tacrolimus ointment for the treatment of adult and pediatric atopic dermatitis: Review on safety and benefits. *The Journal of Dermatology*. 2018;45(8):936-942. doi:10.1111/1346-8138.14501
123. Paller AS, Fölster-Holst R, Chen SC, et al. No evidence of increased cancer incidence in children using topical tacrolimus for atopic dermatitis. *Journal of the American Academy of Dermatology*. Apr 1 2020;doi:10.1016/j.jaad.2020.03.075
124. Ring J, Barker J, Behrendt H, et al. Review of the potential photo-cocarcinogenicity of topical calcineurin inhibitors: position statement of the European Dermatology Forum. *J Eur Acad Dermatol Venereol*. Nov 2005;19(6):663-71. doi:10.1111/j.1468-3083.2005.01315.x
125. Margolis DJ, Hoffstad O, Bilker W. Lack of association between exposure to topical calcineurin inhibitors and skin cancer in adults. *Dermatology*. 2007;214(4):289-95.
126. Thaci D, Salgo R. Malignancy concerns of topical calcineurin inhibitors for atopic dermatitis: facts and controversies. Review. *Clinics in dermatology*. Jan-Feb 2010;28(1):52-6. doi:10.1016/j.clindermatol.2009.04.001
127. Margolis DJ, Abuabara K, Hoffstad OJ, Wan J, Raimondo D, Bilker WB. Association Between Malignancy and Topical Use of Pimecrolimus. *JAMA Dermatol*. Jun 2015;151(6):594-9. doi:10.1001/jamadermatol.2014.4305
128. Deleuran M, Vestergaard C, Vølund A, Thestrup-Pedersen K. Topical Calcineurin Inhibitors, Topical Glucocorticoids and Cancer in Children: A Nationwide Study. *Acta Derm Venereol*. 2016 96(6):834-5.
129. Asgari MM, Tsai AL, Avalos L, Sokil M, Quesenberry CP, Jr. Association Between Topical Calcineurin Inhibitor Use and Keratinocyte Carcinoma Risk Among Adults With Atopic Dermatitis. *JAMA Dermatol*. Aug 12 2020;doi:10.1001/jamadermatol.2020.2240
130. Castellsague J, Kuiper JG, Pottegard A, et al. A cohort study on the risk of lymphoma and skin cancer in users of topical tacrolimus, pimecrolimus, and corticosteroids (Joint European Longitudinal Lymphoma and Skin Cancer Evaluation - JOELLE study). *Clinical epidemiology*. 2018;10:299-310. doi:10.2147/cllep.s146442
131. Czarnecka-Operacz M, Jenerowicz D. Topical calcineurin inhibitors in the treatment of atopic dermatitis – an update on safety issues. 2012;10(3):167-172. doi:<https://doi.org/10.1111/j.1610-0387.2011.07791.x>
132. Vestergaard C, Wollenberg A, Barbarot S, et al. European task force on atopic dermatitis position paper: treatment of parental atopic dermatitis during preconception, pregnancy and lactation period. *J Eur Acad Dermatol Venereol*. Sep 2019;33(9):1644-1659. doi:10.1111/jdv.15709
133. McDowell L, Olin B. Crisaborole: A Novel Nonsteroidal Topical Treatment for Atopic Dermatitis. 2019;35(4):172-178. doi:10.1177/8755122519844507
134. Bissonnette R, Pavel AB, Diaz A, et al. Crisaborole and atopic dermatitis skin biomarkers: An inpatient randomized trial. *J Allergy Clin Immunol*. Nov 2019;144(5):1274-1289. doi:10.1016/j.jaci.2019.06.047
135. Zebda R, Paller AS. Phosphodiesterase 4 inhibitors. *Journal of the American Academy of Dermatology*. 2018/03/01/ 2018;78(3, Supplement 1):S43-S52. doi:<https://doi.org/10.1016/j.jaad.2017.11.056>
136. Yosipovitch G, Gold LF, Lebwohl MG, Silverberg JI, Tallman AM, Zane LT. Early Relief of Pruritus in Atopic Dermatitis with Crisaborole Ointment, A Non-steroidal, Phosphodiesterase 4 Inhibitor. *Acta Derm Venereol*. Apr 27 2018;98(5):484-489. doi:10.2340/00015555-2893
137. Fahrbach K, Tarpey J, Washington EB, et al. Crisaborole Ointment, 2%, for Treatment of Patients with Mild-to-Moderate Atopic Dermatitis: Systematic Literature Review and Network Meta-Analysis. *Dermatol Ther (Heidelb)*. May 20 2020;doi:10.1007/s13555-020-00389-5

138. Paller AS, Tom WL, Lebwohl MG, et al. Efficacy and safety of crisaborole ointment, a novel, nonsteroidal phosphodiesterase 4 (PDE4) inhibitor for the topical treatment of atopic dermatitis (AD) in children and adults. *Journal of the American Academy of Dermatology*. 2016/09/01/ 2016;75(3):494-503.e6. doi:<https://doi.org/10.1016/j.jaad.2016.05.046>
139. Eichenfield LF, Call RS, Forsha DW, et al. Long-term safety of crisaborole ointment 2% in children and adults with mild to moderate atopic dermatitis. *Journal of the American Academy of Dermatology*. Oct 2017;77(4):641-649.e5. doi:10.1016/j.jaad.2017.06.010
140. Hanifin JM, Ellis CN, Frieden IJ, et al. OPA-15406, a novel, topical, nonsteroidal, selective phosphodiesterase-4 (PDE4) inhibitor, in the treatment of adult and adolescent patients with mild to moderate atopic dermatitis (AD): A phase-II randomized, double-blind, placebo-controlled study. *Journal of the American Academy of Dermatology*. 2016/08/01/ 2016;75(2):297-305. doi:<https://doi.org/10.1016/j.jaad.2016.04.001>
141. Ohba F, Matsuki S, Imayama S, et al. Efficacy of a novel phosphodiesterase inhibitor, E6005, in patients with atopic dermatitis: An investigator-blinded, vehicle-controlled study. *J Dermatolog Treat*. 2016;27(5):467-72.
142. Diaz A, Guttman-Yassky E. Topical agents for the treatment of atopic dermatitis. *Expert review of clinical immunology*. Apr 2019;15(4):369-382. doi:10.1080/1744666x.2019.1564038
143. Bissonnette R, Papp KA, Poulin Y, et al. Topical tofacitinib for atopic dermatitis: a phase IIa randomized trial. 2016;175(5):902-911. doi:10.1111/bjd.14871
144. Nakagawa H, Nemoto O, Igarashi A, Nagata T. Efficacy and safety of topical JTE-052, a Janus kinase inhibitor, in Japanese adult patients with moderate-to-severe atopic dermatitis: a phase II, multicentre, randomized, vehicle-controlled clinical study. *British Journal of Dermatology*. 2018;178(2):424-432. doi:10.1111/bjd.16014
145. Kim BS, Howell MD, Sun K, Papp K, Nasir A, Kuligowski ME. Treatment of atopic dermatitis with ruxolitinib cream (JAK1/JAK2 inhibitor) or triamcinolone cream. *Journal of Allergy and Clinical Immunology*. 2020/02/01/ 2020;145(2):572-582. doi:<https://doi.org/10.1016/j.jaci.2019.08.042>
146. Peppers J, Paller AS, Maeda-Chubachi T, et al. A phase 2, randomized dose-finding study of tapinarof (GSK2894512 cream) for the treatment of atopic dermatitis. *Journal of the American Academy of Dermatology*. 2019/01/01/ 2019;80(1):89-98.e3. doi:<https://doi.org/10.1016/j.jaad.2018.06.047>
147. Lee YW, Won C-H, Jung K, et al. Efficacy and safety of PAC-14028 cream – a novel, topical, nonsteroidal, selective TRPV1 antagonist in patients with mild-to-moderate atopic dermatitis: a phase IIb randomized trial. *British Journal of Dermatology*. 2019;180(5):1030-1038. doi:10.1111/bjd.17455
148. Totté JE, van der Feltz WT, Hennekam M, van Belkum A, van Zuuren EJ, Pasmans SG. Prevalence and odds of Staphylococcus aureus carriage in atopic dermatitis: a systematic review and meta-analysis. *Br J Dermatol*. Oct 2016;175(4):687-95. doi:10.1111/bjd.14566
149. Alexander H, Paller AS, Traidl-Hoffmann C, et al. The role of bacterial skin infections in atopic dermatitis: expert statement and review from the International Eczema Council Skin Infection Group. *Br J Dermatol*. Jun 2020;182(6):1331-1342. doi:10.1111/bjd.18643
150. Cornelissen C, Marquardt Y, Czaja K, et al. IL-31 regulates differentiation and filaggrin expression in human organotypic skin models. *J Allergy Clin Immunol*. Feb 2012;129(2):426-33, 433.e1-8. doi:10.1016/j.jaci.2011.10.042
151. Schlievert PM, Case LC, Strandberg KL, Abrams BB, Leung DYM. Superantigen profile of Staphylococcus aureus isolates from patients with steroid-resistant atopic dermatitis. *Clin Infect Dis*. 2008;46(10):1562-1567. doi:10.1086/586746
152. George SM, Karanovic S, Harrison DA, et al. Interventions to reduce Staphylococcus aureus in the management of eczema. *Cochrane Database Syst Rev*. Oct 29 2019;2019(10)doi:10.1002/14651858.CD003871.pub3

153. Sawada Y, Tong Y, Barangi M, et al. Dilute bleach baths used for treatment of atopic dermatitis are not antimicrobial in vitro. *J Allergy Clin Immunol*. May 2019;143(5):1946-1948. doi:10.1016/j.jaci.2019.01.009
154. Juenger M, Ladwig A, Staecker S, et al. Efficacy and safety of silver textile in the treatment of atopic dermatitis (AD). *Curr Med Res Opin*. Apr 2006;22(4):739-50. doi:10.1185/030079906x99990
155. Gauger A, Fischer S, Mempel M, et al. Efficacy and functionality of silver-coated textiles in patients with atopic eczema. *J Eur Acad Dermatol Venereol*. May 2006;20(5):534-41. doi:10.1111/j.1468-3083.2006.01526.x
156. Wollenberg A, Zoch C, Wetzel S, Plewig G, Przybilla B. Predisposing factors and clinical features of eczema herpeticum: a retrospective analysis of 100 cases. *Journal of the American Academy of Dermatology*. Aug 2003;49(2):198-205. doi:10.1067/s0190-9622(03)00896-x
157. Seegräber M, Worm M, Werfel T, et al. Recurrent eczema herpeticum - a retrospective European multicenter study evaluating the clinical characteristics of eczema herpeticum cases in atopic dermatitis patients. *J Eur Acad Dermatol Venereol*. May 2020;34(5):1074-1079. doi:10.1111/jdv.16090
158. Ong PY, Leung DY. Bacterial and Viral Infections in Atopic Dermatitis: a Comprehensive Review. *Clin Rev Allergy Immunol*. Dec 2016;51(3):329-337. doi:10.1007/s12016-016-8548-5
159. Kreth HW, Hoeger PH. Safety, reactogenicity, and immunogenicity of live attenuated varicella vaccine in children between 1 and 9 years of age with atopic dermatitis. *Eur J Pediatr*. Oct 2006;165(10):677-83. doi:10.1007/s00431-006-0103-6
160. Schneider L, Weinberg A, Boguniewicz M, et al. Immune response to varicella vaccine in children with atopic dermatitis compared with nonatopic controls. *The Journal of allergy and clinical immunology*. 2010;126(6):1306-7.e2. doi:10.1016/j.jaci.2010.08.010
161. Osier E, Eichenfield L. The Utility of Cantharidin for the Treatment of Molluscum Contagiosum. *Pediatric dermatology*. 02/18 2015;32doi:10.1111/pde.12518
162. Rush J, Dinulos JG. Childhood skin and soft tissue infections: new discoveries and guidelines regarding the management of bacterial soft tissue infections, molluscum contagiosum, and warts. *Curr Opin Pediatr*. Apr 2016;28(2):250-7. doi:10.1097/mop.0000000000000334
163. Wollenberg A, Engler R. Smallpox, vaccination and adverse reactions to smallpox vaccine. *Curr Opin Allergy Clin Immunol*. Aug 2004;4(4):271-5. doi:10.1097/01.all.0000136758.66442.28
164. Reed JL, Scott DE, Bray M. Eczema vaccinatum. *Clin Infect Dis*. Mar 2012;54(6):832-40. doi:10.1093/cid/cir952
165. Darsow U, Sbornik M, Rombold S, et al. Long-term safety of replication-defective smallpox vaccine (MVA-BN) in atopic eczema and allergic rhinitis. *J Eur Acad Dermatol Venereol*. Nov 2016;30(11):1971-1977. doi:10.1111/jdv.13797
166. Mathes EF, Oza V, Frieden IJ, et al. "Eczema coxsackium" and unusual cutaneous findings in an enterovirus outbreak. *Pediatrics*. Jul 2013;132(1):e149-57. doi:10.1542/peds.2012-3175
167. Neri I, Dondi A, Wollenberg A, et al. Atypical Forms of Hand, Foot, and Mouth Disease: A Prospective Study of 47 Italian Children. *Pediatr Dermatol*. Jul 2016;33(4):429-37. doi:10.1111/pde.12871
168. Lynch MD, Sears A, Cookson H, et al. Disseminated coxsackievirus A6 affecting children with atopic dermatitis. *Clinical and Experimental Dermatology*. 2015/07/01 2015;40(5):525-528. doi:10.1111/ced.12574
169. Johnson VK, Hayman JL, McCarthy CA, Cardona ID. Successful treatment of eczema coxsackium with wet wrap therapy and low-dose topical corticosteroid. *J Allergy Clin Immunol Pract*. Nov-Dec 2014;2(6):803-4. doi:10.1016/j.jaip.2014.07.018
170. Sparber F, De Gregorio C, Steckholzer S, et al. The Skin Commensal Yeast *Malassezia* Triggers a Type 17 Response that Coordinates Anti-fungal Immunity and Exacerbates Skin Inflammation. *Cell Host Microbe*. Mar 13 2019;25(3):389-403.e6. doi:10.1016/j.chom.2019.02.002

171. Thammahong A, Kiatsurayanon C, Edwards SW, Rerknimitr P, Chiewchengchol D. The clinical significance of fungi in atopic dermatitis. *International journal of dermatology*. Aug 2020;59(8):926-935. doi:10.1111/ijd.14941
172. Glatz M, Bosshard PP, Hoetzenecker W, Schmid-Grendelmeier P. The Role of *Malassezia* spp. in Atopic Dermatitis. *J Clin Med*. 2015;4(6):1217-1228. doi:10.3390/jcm4061217
173. Kaffenberger BH, Mathis J, Zirwas MJ. A retrospective descriptive study of oral azole antifungal agents in patients with patch test-negative head and neck predominant atopic dermatitis. *Journal of the American Academy of Dermatology*. Sep 2014;71(3):480-3. doi:10.1016/j.jaad.2014.04.045
174. Svejgaard E, Larsen PO, Deleuran M, Ternowitz T, Roed-Petersen J, Nilsson J. Treatment of head and neck dermatitis comparing itraconazole 200 mg and 400 mg daily for 1 week with placebo. *J Eur Acad Dermatol Venereol*. Jul 2004;18(4):445-9. doi:10.1111/j.1468-3083.2004.00963.x
175. Lorette G, Ermosilla V. Clinical efficacy of a new ciclopiroxolamine/zinc pyrithione shampoo in scalp seborrheic dermatitis treatment. *Eur J Dermatol*. Sep-Oct 2006;16(5):558-64.
176. Brodská P, Panzner P, Pizinger K, Schmid-Grendelmeier P. IgE-Mediated Sensitization to *Malassezia* in Atopic Dermatitis: More Common in Male Patients and in Head and Neck Type. *Dermatitis*. 2014;25(3):120-126. doi:10.1097/der.000000000000040
177. Glatz M, Buchner M, Von Bartenwerffer W, et al. *Malassezia* spp.-specific immunoglobulin E level is a marker for severity of atopic dermatitis in adults. *Acta dermato-venereologica*. 2015;95(2):191-6.
178. Kamata Y, Tominaga M, Takamori K. Itch in Atopic Dermatitis Management. *Curr Probl Dermatol*. 2016;50:86-93. doi:10.1159/000446048
179. Sher LG, Chang J, Patel IB, Balkrishnan R, Fleischer AB, Jr. Relieving the pruritus of atopic dermatitis: a meta-analysis. *Acta Derm Venereol*. Sep 2012;92(5):455-61. doi:10.2340/00015555-1360
180. Reszke R, Krajewski P, Szepietowski JC. Emerging Therapeutic Options for Chronic Pruritus. *Am J Clin Dermatol*. Oct 2020;21(5):601-618. doi:10.1007/s40257-020-00534-y
181. Simpson EL, Bieber T, Guttman-Yassky E, et al. Two Phase 3 Trials of Dupilumab versus Placebo in Atopic Dermatitis. *N Engl J Med*. Dec 15 2016;375(24):2335-2348. doi:10.1056/NEJMoa1610020
182. Silverberg JI, Yosipovitch G, Simpson EL, et al. Dupilumab treatment results in early and sustained improvements in itch in adolescents and adults with moderate to severe atopic dermatitis: Analysis of the randomized phase 3 studies SOLO 1 and SOLO 2, AD ADOL, and CHRONOS. *Journal of the American Academy of Dermatology*. Jun 2020;82(6):1328-1336. doi:10.1016/j.jaad.2020.02.060
183. Agache I, Song Y, Posso M, et al. Efficacy and safety of dupilumab for moderate-to-severe atopic dermatitis: A systematic review for the EAACI biologicals guidelines. *Allergy*. Jan 2021;76(1):45-58. doi:10.1111/all.14510
184. Worm M, Simpson EL, Thaçi D, et al. Efficacy and Safety of Multiple Dupilumab Dose Regimens After Initial Successful Treatment in Patients With Atopic Dermatitis: A Randomized Clinical Trial. *JAMA Dermatol*. Feb 1 2020;156(2):131-143. doi:10.1001/jamadermatol.2019.3617
185. Wollenberg A, Blauvelt A, Guttman-Yassky E, et al. Tralokinumab for moderate-to-severe atopic dermatitis: results from two 52-week, randomized, double-blind, multicentre, placebo-controlled phase III trials (ECZTRA 1 and ECZTRA 2). *Br J Dermatol*. Mar 2021;184(3):437-449. doi:10.1111/bjd.19574
186. Simpson EL, Sinclair R, Forman S, et al. Efficacy and safety of abrocitinib in adults and adolescents with moderate-to-severe atopic dermatitis (JADE MONO-1): a multicentre, double-blind, randomised, placebo-controlled, phase 3 trial. *Lancet*. Jul 25 2020;396(10246):255-266. doi:10.1016/s0140-6736(20)30732-7
187. Simpson EL, Lacour JP, Spelman L, et al. Baricitinib in patients with moderate-to-severe atopic dermatitis and inadequate response to topical corticosteroids: results from two randomized monotherapy phase III trials. *Br J Dermatol*. Aug 2020;183(2):242-255. doi:10.1111/bjd.18898

188. Guttman-Yassky E, Teixeira HD, Simpson EL, et al. Once-daily upadacitinib versus placebo in adolescents and adults with moderate-to-severe atopic dermatitis (Measure Up 1 and Measure Up 2): results from two replicate double-blind, randomised controlled phase 3 trials. *Lancet*. Jun 5 2021;397(10290):2151-2168. doi:10.1016/s0140-6736(21)00588-2
189. Schommer A, Matthies C, Petersen I, Augustin M. Effektivität einer Polidocanol-Harnstoff-Kombination bei trockener, juckender Haut. Efficacy of a Polidocanol-Urea-Combination in Dry, Itching Skin. *Aktuelle Dermatologie*. // 22.02.2007 2007;33(01/02):33-38.
190. Hauss H, Proppe A, Matthies C. Vergleichende Untersuchungen zur Behandlung von trockener, juckender Haut mit einer Zubereitung aus Harnstoff und Polidocanol sowie mit einer Linolsäure-haltigen Fettcreme. Ergebnisse aus der Praxis. *Derm Beruf Umwelt*. 1993;41:184-188.
191. Weisshaar E, Heyer G, Forster C, Handwerker HO. Effect of topical capsaicin on the cutaneous reactions and itching to histamine in atopic eczema compared to healthy skin. *Arch Dermatol Res*. Jun 1998;290(6):306-11. doi:10.1007/s004030050309
192. Reimann S, Luger T, Metze D. [Topical administration of capsaicin in dermatology for treatment of itching and pain]. *Hautarzt*. Mar 2000;51(3):164-72. Topische Anwendung von Capsaicin in der Dermatologie zur Therapie von Juckreiz und Schmerz. doi:10.1007/s001050051014
193. Garritsen FM, Brouwer MW, Limpens J, Spuls PI. Photo(chemo)therapy in the management of atopic dermatitis: an updated systematic review with implications for practice and research. *Br J Dermatol*. Mar 2014;170(3):501-13. doi:10.1111/bjd.12645
194. Jaworek A, Szafraniec K, Jaworek M, Matusiak Ł, Wojas-Pelc A, Szepietowski JC. Itch Relief in Atopic Dermatitis: Comparison of Narrowband Ultraviolet B Radiation and Cyclosporine Treatment. *Acta Derm Venereol*. Oct 14 2020;100(17):adv00291. doi:10.2340/00015555-3652
195. Doherty V, Sylvester DG, Kennedy CT, Harvey SG, Calthrop JG, Gibson JR. Treatment of itching in atopic eczema with antihistamines with a low sedative profile. *Bmj*. Jan 14 1989;298(6666):96. doi:10.1136/bmj.298.6666.96
196. Henz BM, Metzenauer P, O'Keefe E, Zuberbier T. Differential effects of new-generation H1-receptor antagonists in pruritic dermatoses. *Allergy*. Feb 1998;53(2):180-3. doi:10.1111/j.1398-9995.1998.tb03867.x
197. Langeland T, Fagertun HE, Larsen S. Therapeutic effect of loratadine on pruritus in patients with atopic dermatitis. A multi-crossover-designed study. *Allergy*. Jan 1994;49(1):22-6. doi:10.1111/j.1398-9995.1994.tb00768.x
198. La Rosa M, Ranno C, Musarra I, Guglielmo F, Corrias A, Bellanti JA. Double-blind study of cetirizine in atopic eczema in children. *Ann Allergy*. Aug 1994;73(2):117-22.
199. Wahlgren CF, Hägermark O, Bergström R. The antipruritic effect of a sedative and a non-sedative antihistamine in atopic dermatitis. *Br J Dermatol*. Apr 1990;122(4):545-51. doi:10.1111/j.1365-2133.1990.tb14732.x
200. Munday J, Bloomfield R, Goldman M, et al. Chlorpheniramine is no more effective than placebo in relieving the symptoms of childhood atopic dermatitis with a nocturnal itching and scratching component. *Dermatology*. 2002;205(1):40-5. doi:10.1159/000063138
201. Hannuksela M, Kalimo K, Lammintausta K, et al. Dose ranging study: cetirizine in the treatment of atopic dermatitis in adults. *Ann Allergy*. Feb 1993;70(2):127-33.
202. Chunharas A, Wisuthsarewong W, Wananukul S, Viravan S. Therapeutic efficacy and safety of loratadine syrup in childhood atopic dermatitis treated with mometasone furoate 0.1 per cent cream. *J Med Assoc Thai*. Apr 2002;85(4):482-7.
203. Kawakami T, Kaminishi K, Soma Y, Kushimoto T, Mizoguchi M. Oral antihistamine therapy influences plasma tryptase levels in adult atopic dermatitis. *J Dermatol Sci*. Aug 2006;43(2):127-34. doi:10.1016/j.jdermsci.2006.04.002

204. Matteredne U, Böhmer MM, Weisshaar E, Jupiter A, Carter B, Apfelbacher CJ. Oral H1 antihistamines as 'add-on' therapy to topical treatment for eczema. *Cochrane Database Syst Rev*. Jan 22 2019;1(1):Cd012167. doi:10.1002/14651858.CD012167.pub2
205. Kawashima M, Tango T, Noguchi T, Inagi M, Nakagawa H, Harada S. Addition of fexofenadine to a topical corticosteroid reduces the pruritus associated with atopic dermatitis in a 1-week randomized, multicentre, double-blind, placebo-controlled, parallel-group study. *Br J Dermatol*. Jun 2003;148(6):1212-21. doi:10.1046/j.1365-2133.2003.05293.x
206. Simons FE. Safety of levocetirizine treatment in young atopic children: An 18-month study. *Pediatr Allergy Immunol*. Sep 2007;18(6):535-42. doi:10.1111/j.1399-3038.2007.00558.x
207. Church MK, Maurer M, Simons FE, et al. Risk of first-generation H(1)-antihistamines: a GA(2)LEN position paper. *Allergy*. Apr 2010;65(4):459-66. doi:10.1111/j.1398-9995.2009.02325.x
208. Adam K, Oswald I. The hypnotic effects of an antihistamine: promethazine. *Br J Clin Pharmacol*. Dec 1986;22(6):715-7. doi:10.1111/j.1365-2125.1986.tb02962.x
209. Monroe EW. Efficacy and safety of nalmefene in patients with severe pruritus caused by chronic urticaria and atopic dermatitis. *Journal of the American Academy of Dermatology*. Jul 1989;21(1):135-6. doi:10.1016/s0190-9622(89)80353-6
210. Burch JR, Harrison PV. Opiates, sleep and itch. *Clin Exp Dermatol*. Nov 1988;13(6):418-9. doi:10.1111/j.1365-2230.1988.tb00744.x
211. Banerji D, Fox R, Seleznick M, Lockey R. 337 Controlled antipruritic trial of nalmefene (N) in chronic urticaria (CU) and atopic dermatitis (AD). *Journal of Allergy and Clinical Immunology*. 1988;81(1):252. doi:10.1016/0091-6749(88)90571-4
212. Metze D, Reimann S, Beissert S, Luger T. Efficacy and safety of naltrexone, an oral opiate receptor antagonist, in the treatment of pruritus in internal and dermatological diseases. *Journal of the American Academy of Dermatology*. Oct 1999;41(4):533-9.
213. Malekzad F, Arbabi M, Mohtasham N, et al. Efficacy of oral naltrexone on pruritus in atopic eczema: a double-blind, placebo-controlled study. *J Eur Acad Dermatol Venereol*. Aug 2009;23(8):948-50. doi:10.1111/j.1468-3083.2009.03129.x
214. Ständer S, Böckenholt B, Schürmeyer-Horst F, et al. Treatment of chronic pruritus with the selective serotonin re-uptake inhibitors paroxetine and fluvoxamine: results of an open-labelled, two-arm proof-of-concept study. *Acta Derm Venereol*. 2009;89(1):45-51. doi:10.2340/00015555-0553
215. Jekler J, Larko O. Combined UVA-UVB versus UVB phototherapy for atopic dermatitis: a paired-comparison study. *Journal of the American Academy of Dermatology*. Jan 1990;22(1):49-53. doi:10.1016/0190-9622(90)70006-4
216. Jekler J, Larko O. UVB phototherapy of atopic dermatitis. *Br J Dermatol*. Dec 1988;119(6):697-705. doi:10.1111/j.1365-2133.1988.tb03490.x
217. Jekler J, Larko O. UVA solarium versus UVB phototherapy of atopic dermatitis: a paired-comparison study. *Br J Dermatol*. Dec 1991;125(6):569-72. doi:10.1111/j.1365-2133.1991.tb14796.x
218. Jekler J, Larko O. Phototherapy for atopic dermatitis with ultraviolet A (UVA), low-dose UVB and combined UVA and UVB: two paired-comparison studies. *Photodermatol Photoimmunol Photomed*. Aug 1991;8(4):151-6.
219. Majoie IM, Oldhoff JM, van Weelden H, et al. Narrowband ultraviolet B and medium-dose ultraviolet A1 are equally effective in the treatment of moderate to severe atopic dermatitis. *Journal of the American Academy of Dermatology*. Jan 2009;60(1):77-84. doi:10.1016/j.jaad.2008.08.048
220. Der-Petrossian M, Seeber A, Honigsman H, Tanew A. Half-side comparison study on the efficacy of 8-methoxypsoralen bath-PUVA versus narrow-band ultraviolet B phototherapy in patients with severe chronic atopic dermatitis. *Br J Dermatol*. Jan 2000;142(1):39-43. doi:10.1046/j.1365-2133.2000.03239.x
221. Gambichler T, Othlinghaus N, Tomi NS, et al. Medium-dose ultraviolet (UV) A1 vs. narrowband UVB phototherapy in atopic eczema: a randomized crossover study. *Br J Dermatol*. Mar 2009;160(3):652-8. doi:10.1111/j.1365-2133.2008.08984.x

222. Legat FJ, Hofer A, Brabek E, Quehenberger F, Kerl H, Wolf P. Narrowband UV-B vs medium-dose UV-A1 phototherapy in chronic atopic dermatitis. *Arch Dermatol*. Feb 2003;139(2):223-4. doi:10.1001/archderm.139.2.223
223. Reynolds NJ, Franklin V, Gray JC, Diffey BL, Farr PM. Narrow-band ultraviolet B and broad-band ultraviolet A phototherapy in adult atopic eczema: a randomised controlled trial. *Lancet*. Jun 23 2001;357(9273):2012-6. doi:10.1016/S0140-6736(00)05114-X
224. Heinlin J, Schiffner-Rohe J, Schiffner R, et al. A first prospective randomized controlled trial on the efficacy and safety of synchronous balneophototherapy vs. narrow-band UVB monotherapy for atopic dermatitis. *J Eur Acad Dermatol Venereol*. Jul 2011;25(7):765-73. doi:10.1111/j.1468-3083.2010.03857.x
225. Tzaneva S, Seeber A, Schwaiger M, Honigsmann H, Tanew A. High-dose versus medium-dose UVA1 phototherapy for patients with severe generalized atopic dermatitis. *Journal of the American Academy of Dermatology*. Oct 2001;45(4):503-7. doi:10.1067/mjd.2001.114743
226. Dittmar HC, Pflieger D, Schopf E, Simon JC. [UVA1 phototherapy. Pilot study of dose finding in acute exacerbated atopic dermatitis]. *Hautarzt*. May 2001;52(5):423-7. UVA1-Phototherapie. Pilotstudie zur Dosisfindung bei der bei akut exazerbierten atopischen Dermatitis. doi:10.1007/s001050051336
227. Krutmann J, Czech W, Diepgen T, Niedner R, Kapp A, Schopf E. High-dose UVA1 therapy in the treatment of patients with atopic dermatitis. *Journal of the American Academy of Dermatology*. Feb 1992;26(2 Pt 1):225-30. doi:10.1016/0190-9622(92)70031-a
228. Krutmann J, Diepgen TL, Luger TA, et al. High-dose UVA1 therapy for atopic dermatitis: results of a multicenter trial. *Journal of the American Academy of Dermatology*. Apr 1998;38(4):589-93. doi:10.1016/s0190-9622(98)70123-9
229. Tzaneva S, Kittler H, Holzer G, et al. 5-Methoxypsoralen plus ultraviolet (UV) A is superior to medium-dose UVA1 in the treatment of severe atopic dermatitis: a randomized crossover trial. *Br J Dermatol*. Mar 2010;162(3):655-60. doi:10.1111/j.1365-2133.2009.09514.x
230. von Kobyletzki G, Pieck C, Hoffmann K, Freitag M, Altmeyer P. Medium-dose UVA1 cold-light phototherapy in the treatment of severe atopic dermatitis. *Journal of the American Academy of Dermatology*. Dec 1999;41(6):931-937. doi:10.1016/S0190-9622(99)70249-5
231. Granlund H, Erkkö P, Remitz A, et al. Comparison of cyclosporin and UVAB phototherapy for intermittent one-year treatment of atopic dermatitis. *Acta Derm Venereol*. Jan-Feb 2001;81(1):22-7. doi:10.1080/00015550120235
232. Valkova S, Velkova A. UVA/UVB phototherapy for atopic dermatitis revisited. *J Dermatolog Treat*. Jul 2004;15(4):239-44. doi:10.1080/09546630410035338
233. Byun HJ, Lee HI, Kim B, et al. Full-spectrum light phototherapy for atopic dermatitis. *International journal of dermatology*. Jan 2011;50(1):94-101. doi:10.1111/j.1365-4632.2010.04663.x
234. Qayyum S, Asad F, Agrawal R, Khurshid K, Rani Z, Pal SS. Comparison of efficacy and safety of ultraviolet A radiation versus ultraviolet B radiation in atopic dermatitis. *Journal of Pakistan Association of Dermatologists*. 2016;26(3):223-228.
235. Pacifico A, Iacovelli P, Damiani G, et al. 'High dose' vs. 'medium dose' UVA1 phototherapy in Italian patients with severe atopic dermatitis. *J Eur Acad Dermatol Venereol*. Apr 2019;33(4):718-724. doi:10.1111/jdv.15362
236. Collins P, Ferguson J. Narrowband (TL-01) UVB air-conditioned phototherapy for atopic eczema in children. *Br J Dermatol*. Oct 1995;133(4):653-5. doi:10.1111/j.1365-2133.1995.tb02725.x
237. Jury CS, McHenry P, Burden AD, Lever R, Bilisland D. Narrowband ultraviolet B (UVB) phototherapy in children. *Clin Exp Dermatol*. Mar 2006;31(2):196-9. doi:10.1111/j.1365-2230.2006.02061.x
238. Clayton TH, Clark SM, Turner D, Goulden V. The treatment of severe atopic dermatitis in childhood with narrowband ultraviolet B phototherapy. *Clin Exp Dermatol*. Jan 2007;32(1):28-33. doi:10.1111/j.1365-2230.2006.02292.x

239. Tay YK, Morelli JG, Weston WL. Experience with UVB phototherapy in children. *Pediatr Dermatol*. Sep-Oct 1996;13(5):406-9. doi:10.1111/j.1525-1470.1996.tb00711.x
240. Sheehan MP, Atherton DJ, Norris P, Hawk J. Oral psoralen photochemotherapy in severe childhood atopic eczema: an update. *Br J Dermatol*. Oct 1993;129(4):431-6. doi:10.1111/j.1365-2133.1993.tb03171.x
241. Mok ZR, Koh MJ, Chong WS. Is phototherapy useful in the treatment of atopic dermatitis in asian children? A 5-year report from singapore. *Pediatr Dermatol*. Nov-Dec 2014;31(6):698-702. doi:10.1111/pde.12405
242. Pavlovsky M, Baum S, Shpiro D, Pavlovsky L, Pavlotsky F. Narrow band UVB: is it effective and safe for paediatric psoriasis and atopic dermatitis? *J Eur Acad Dermatol Venereol*. Jun 2011;25(6):727-9. doi:10.1111/j.1468-3083.2010.03832.x
243. Darne S, Leech SN, Taylor AE. Narrowband ultraviolet B phototherapy in children with moderate-to-severe eczema: a comparative cohort study. *Br J Dermatol*. Jan 2014;170(1):150-6. doi:10.1111/bjd.12580
244. Dayal S, Pathak K, Sahu P, Jain VK. Narrowband UV-B phototherapy in childhood atopic dermatitis: efficacy and safety. *An Bras Dermatol*. Nov-Dec 2017;92(6):801-806. doi:10.1590/abd1806-4841.20175958
245. Vermeulen FM, Gerbens LAA, Schmitt J, et al. The European TREATment of ATopic eczema (TREAT) Registry Taskforce survey: prescribing practices in Europe for phototherapy and systemic therapy in adult patients with moderate-to-severe atopic eczema. *Br J Dermatol*. Feb 18 2020;doi:10.1111/bjd.18959
246. Bedair K, Elhadad A, Hamad S, Ferguson J, Donnan P, Dawe RS. No association between whole-body ultraviolet A1 phototherapy and skin cancers in humans: a cancer registry linkage study. *British Journal of Dermatology*. May 26 2020;doi:10.1111/bjd.19041
247. Weischer M, Blum A, Eberhard F, Rocken M, Berneburg M. No evidence for increased skin cancer risk in psoriasis patients treated with broadband or narrowband UVB phototherapy: A first retrospective study. *Acta Dermato-Venereologica*. Sep 2004;84(5):370-374. doi:10.1080/00015550410026948
248. Lee E, Koo J, Berger T. UVB phototherapy and skin cancer risk: a review of the literature. *International journal of dermatology*. May 2005;44(5):355-60. doi:10.1111/j.1365-4632.2004.02186.x
249. Archier E, Devaux S, Castela E, et al. Carcinogenic risks of psoralen UV-A therapy and narrowband UV-B therapy in chronic plaque psoriasis: a systematic literature review. *J Eur Acad Dermatol Venereol*. May 2012;26 Suppl 3:22-31. doi:10.1111/j.1468-3083.2012.04520.x
250. Stern RS, Liebman EJ, Vakeva L. Oral psoralen and ultraviolet-A light (PUVA) treatment of psoriasis and persistent risk of nonmelanoma skin cancer. PUVA Follow-up Study. *J Natl Cancer Inst*. Sep 2 1998;90(17):1278-84. doi:10.1093/jnci/90.17.1278
251. Stern RS, Nichols KT, Vakeva LH. Malignant melanoma in patients treated for psoriasis with methoxsalen (psoralen) and ultraviolet A radiation (PUVA). The PUVA Follow-Up Study. *N Engl J Med*. Apr 10 1997;336(15):1041-5. doi:10.1056/NEJM199704103361501
252. Paul CF, Ho VC, McGeown C, et al. Risk of malignancies in psoriasis patients treated with cyclosporine: a 5 y cohort study. *J Invest Dermatol*. Feb 2003;120(2):211-6. doi:10.1046/j.1523-1747.2003.12040.x
253. Marcil I, Stern RS. Squamous-cell cancer of the skin in patients given PUVA and ciclosporin: nested cohort crossover study. *Lancet*. Sep 29 2001;358(9287):1042-5. doi:10.1016/S0140-6736(01)06179-7
254. Schmitt J, Spuls PI, Thomas KS, et al. The Harmonising Outcome Measures for Eczema (HOME) statement to assess clinical signs of atopic eczema in trials. *J Allergy Clin Immunol*. Oct 2014;134(4):800-7. doi:10.1016/j.jaci.2014.07.043
255. Stadler PC, Renner ED, Milner J, Wollenberg A. Inborn Error of Immunity or Atopic Dermatitis: When to be Concerned and How to Investigate. *J Allergy Clin Immunol Pract*. Apr 2021;9(4):1501-1507. doi:10.1016/j.jaip.2021.01.037

256. Thyssen JP, Vestergaard C, Barbarot S, et al. European Task Force on Atopic Dermatitis: position on vaccination of adult patients with atopic dermatitis against COVID-19 (SARS-CoV-2) being treated with systemic medication and biologics. *J Eur Acad Dermatol Venereol*. May 2021;35(5):e308-e311. doi:10.1111/jdv.17167
257. Wollenberg A, Flohr C, Simon D, et al. European Task Force on Atopic Dermatitis statement on severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2) infection and atopic dermatitis. *J Eur Acad Dermatol Venereol*. Jun 2020;34(6):e241-e242. doi:10.1111/jdv.16411
258. Lennard L. The clinical pharmacology of 6-mercaptopurine. *Eur J Clin Pharmacol*. 1992;43(4):329-39. doi:10.1007/bf02220605
259. Drucker AM, Ellis AG, Bohdanowicz M, et al. Systemic Immunomodulatory Treatments for Patients With Atopic Dermatitis: A Systematic Review and Network Meta-analysis. *JAMA Dermatol*. Jun 1 2020;156(6):659-667. doi:10.1001/jamadermatol.2020.0796
260. Roekevisch E, Spuls PI, Kuester D, Limpens J, Schmitt J. Efficacy and safety of systemic treatments for moderate-to-severe atopic dermatitis: a systematic review. *J Allergy Clin Immunol*. Feb 2014;133(2):429-38. doi:10.1016/j.jaci.2013.07.049
261. Thomsen SF, Karlsmark T, Clemmensen KK, et al. Outcome of treatment with azathioprine in severe atopic dermatitis: a 5-year retrospective study of adult outpatients. *Br J Dermatol*. Apr 2015;172(4):1122-4. doi:10.1111/bjd.13495
262. Garritsen FM, Roekevisch E, van der Schaft J, Deinum J, Spuls PI, de Bruin-Weller MS. Ten years experience with oral immunosuppressive treatment in adult patients with atopic dermatitis in two academic centres. *J Eur Acad Dermatol Venereol*. Oct 2015;29(10):1905-12. doi:10.1111/jdv.13064
263. van der Schaft J, van Zuilen AD, Deinum J, Bruijnzeel-Koomen CA, de Bruin-Weller MS. Serum creatinine levels during and after long-term treatment with cyclosporine A in patients with severe atopic dermatitis. *Acta Derm Venereol*. Nov 2015;95(8):963-7. doi:10.2340/00015555-2125
264. Gerbens LAA, Hamann SAS, Brouwer MWD, Roekevisch E, Leeflang MMG, Spuls PI. Methotrexate and azathioprine for severe atopic dermatitis: a 5-year follow-up study of a randomized controlled trial. *Br J Dermatol*. Jun 2018;178(6):1288-1296. doi:10.1111/bjd.16240
265. Meggitt SJ, Gray JC, Reynolds NJ. Azathioprine dosed by thiopurine methyltransferase activity for moderate-to-severe atopic eczema: a double-blind, randomised controlled trial. *Lancet*. Mar 11 2006;367(9513):839-46. doi:10.1016/s0140-6736(06)68340-2
266. Meggitt SJ, Reynolds NJ. Azathioprine for atopic dermatitis. *Clin Exp Dermatol*. Jul 2001;26(5):369-75. doi:10.1046/j.1365-2230.2001.00837.x
267. Taylor AE, Shuster S. Skin cancer after renal transplantation: the causal role of azathioprine. *Acta Derm Venereol*. 1992;72(2):115-9.
268. Meggitt SJ, Anstey AV, Mohd Mustapa MF, Reynolds NJ, Wakelin S. British Association of Dermatologists' guidelines for the safe and effective prescribing of azathioprine 2011. *Br J Dermatol*. Oct 2011;165(4):711-34. doi:10.1111/j.1365-2133.2011.10575.x
269. Janssen NM, Genta MS. The effects of immunosuppressive and anti-inflammatory medications on fertility, pregnancy, and lactation. *Arch Intern Med*. Mar 13 2000;160(5):610-9. doi:10.1001/archinte.160.5.610
270. Noguera-Morel L, Knöpfel N, Torrelo A, Hernández-Martín A. A Retrospective Study of Systemic Treatment of Severe Atopic Dermatitis With Azathioprine: Effectiveness and Tolerance in 11 Pediatric Patients. *Actas Dermosifiliogr*. Apr 2019;110(3):227-231. Estudio retrospectivo del tratamiento sistémico de la dermatitis atópica grave con azatioprina. Eficacia y tolerancia en 11 pacientes pediátricos. doi:10.1016/j.ad.2018.06.014
271. Schmitt J, Schmitt N, Meurer M. Cyclosporin in the treatment of patients with atopic eczema - a systematic review and meta-analysis. *J Eur Acad Dermatol Venereol*. May 2007;21(5):606-19. doi:10.1111/j.1468-3083.2006.02023.x

272. Seger EW, Wechter T, Strowd L, Feldman SR. Relative efficacy of systemic treatments for atopic dermatitis. *Journal of the American Academy of Dermatology*. Feb 2019;80(2):411-416.e4. doi:10.1016/j.jaad.2018.09.053
273. Dal Bello G, Maurelli M, Schena D, Girolomoni G, Gisondi P. Drug survival of dupilumab compared to cyclosporin in moderate-to-severe atopic dermatitis patients. *Dermatol Ther*. Nov 2020;33(6):e13979. doi:10.1111/dth.13979
274. Goujon C, Viguier M, Staumont-Sallé D, et al. Methotrexate Versus Cyclosporine in Adults with Moderate-to-Severe Atopic Dermatitis: A Phase III Randomized Noninferiority Trial. *J Allergy Clin Immunol Pract*. Mar-Apr 2018;6(2):562-569.e3. doi:10.1016/j.jaip.2017.07.007
275. Berth-Jones J, Finlay AY, Zaki I, et al. Cyclosporine in severe childhood atopic dermatitis: a multicenter study. *Journal of the American Academy of Dermatology*. Jun 1996;34(6):1016-21. doi:10.1016/s0190-9622(96)90281-9
276. Rhen T, Cidlowski JA. Antiinflammatory action of glucocorticoids--new mechanisms for old drugs. *N Engl J Med*. Oct 20 2005;353(16):1711-23. doi:10.1056/NEJMra050541
277. La Rosa M, Musarra I, Ranno C, et al. A randomized, double-blind, placebo-controlled, crossover trial of systemic flunisolide in the treatment of children with severe atopic dermatitis. *Current Therapeutic Research*. 1995/07/01/ 1995;56(7):720-726. doi:[https://doi.org/10.1016/0011-393X\(95\)85143-7](https://doi.org/10.1016/0011-393X(95)85143-7)
278. Saag KG, Koehnke R, Caldwell JR, et al. Low dose long-term corticosteroid therapy in rheumatoid arthritis: an analysis of serious adverse events. *Am J Med*. Feb 1994;96(2):115-23. doi:10.1016/0002-9343(94)90131-7
279. Richter B, Neises G, Clar C. Glucocorticoid withdrawal schemes in chronic medical disorders. A systematic review. *Endocrinol Metab Clin North Am*. Sep 2002;31(3):751-78. doi:10.1016/s0889-8529(02)00008-7
280. Alqarni AM, Zeidler MP. How does methotrexate work? *Biochem Soc Trans*. Apr 29 2020;48(2):559-567. doi:10.1042/bst20190803
281. Weatherhead SC, Wahie S, Reynolds NJ, Meggitt SJ. An open-label, dose-ranging study of methotrexate for moderate-to-severe adult atopic eczema. *Br J Dermatol*. Feb 2007;156(2):346-51. doi:10.1111/j.1365-2133.2006.07686.x
282. Goujon C, Bérard F, Dahel K, et al. Methotrexate for the treatment of adult atopic dermatitis. *Eur J Dermatol*. Mar-Apr 2006;16(2):155-8.
283. Lyakhovitsky A, Barzilai A, Heyman R, et al. Low-dose methotrexate treatment for moderate-to-severe atopic dermatitis in adults. *J Eur Acad Dermatol Venereol*. Jan 2010;24(1):43-9. doi:10.1111/j.1468-3083.2009.03351.x
284. Schram ME, Roekevisch E, Leeflang MM, Bos JD, Schmitt J, Spuls PI. A randomized trial of methotrexate versus azathioprine for severe atopic eczema. *J Allergy Clin Immunol*. Aug 2011;128(2):353-9. doi:10.1016/j.jaci.2011.03.024
285. El-Khalawany MA, Hassan H, Shaaban D, Ghonaim N, Eassa B. Methotrexate versus cyclosporine in the treatment of severe atopic dermatitis in children: a multicenter experience from Egypt. *Eur J Pediatr*. Mar 2013;172(3):351-6. doi:10.1007/s00431-012-1893-3
286. Deo M, Yung A, Hill S, Rademaker M. Methotrexate for treatment of atopic dermatitis in children and adolescents. *International journal of dermatology*. Aug 2014;53(8):1037-41. doi:10.1111/ijd.12314
287. Taieb Y, Baum S, Ben Amitai D, Barzilai A, Greenberger S. The use of methotrexate for treating childhood atopic dermatitis: a multicenter retrospective study. *J Dermatolog Treat*. May 2019;30(3):240-244. doi:10.1080/09546634.2018.1508816
288. Shah N, Alhusayen R, Walsh S, Shear NH. Methotrexate in the Treatment of Moderate to Severe Atopic Dermatitis: A Retrospective Study. *Journal of cutaneous medicine and surgery*. Sep/Oct 2018;22(5):484-487. doi:10.1177/1203475418781336

289. Ortiz Z, Shea B, Suarez-Almazor ME, Moher D, Wells GA, Tugwell P. The efficacy of folic acid and folinic acid in reducing methotrexate gastrointestinal toxicity in rheumatoid arthritis. A metaanalysis of randomized controlled trials. *J Rheumatol*. Jan 1998;25(1):36-43.
290. Dogra S, Mahajan R. Systemic methotrexate therapy for psoriasis: past, present and future. *Clin Exp Dermatol*. Aug 2013;38(6):573-88. doi:10.1111/ced.12062
291. Weinblatt ME. Methotrexate in rheumatoid arthritis: a quarter century of development. *Trans Am Clin Climatol Assoc*. 2013;124:16-25.
292. Allison AC. Mechanisms of action of mycophenolate mofetil. *Lupus*. 2005;14 Suppl 1:s2-8. doi:10.1191/0961203305lu2109oa
293. Phan K, Smith SD. Mycophenolate mofetil and atopic dermatitis: systematic review and meta-analysis. *J Dermatolog Treat*. Dec 2020;31(8):810-814. doi:10.1080/09546634.2019.1642996
294. Dias-Polak D, Bergman R, Avitan-Hersh E. Mycophenolate mofetil therapy in adult patients with recalcitrant atopic dermatitis. *J Dermatolog Treat*. Feb 2019;30(1):49-51. doi:10.1080/09546634.2018.1468068
295. Beck LA, Thaçi D, Hamilton JD, et al. Dupilumab treatment in adults with moderate-to-severe atopic dermatitis. *N Engl J Med*. Jul 10 2014;371(2):130-9. doi:10.1056/NEJMoa1314768
296. Beck LA, Thaçi D, Deleuran M, et al. Dupilumab Provides Favorable Safety and Sustained Efficacy for up to 3 Years in an Open-Label Study of Adults with Moderate-to-Severe Atopic Dermatitis. *Am J Clin Dermatol*. Aug 2020;21(4):567-577. doi:10.1007/s40257-020-00527-x
297. Wollenberg A, Beck LA, Blauvelt A, et al. Laboratory safety of dupilumab in moderate-to-severe atopic dermatitis: results from three phase III trials (LIBERTY AD SOLO 1, LIBERTY AD SOLO 2, LIBERTY AD CHRONOS). *Br J Dermatol*. May 2020;182(5):1120-1135. doi:10.1111/bjd.18434
298. Akinlade B, Guttman-Yassky E, de Bruin-Weller M, et al. Conjunctivitis in dupilumab clinical trials. *Br J Dermatol*. Sep 2019;181(3):459-473. doi:10.1111/bjd.17869
299. Wollenberg A, Ariens L, Thurau S, van Luijk C, Seegräber M, de Bruin-Weller M. Conjunctivitis occurring in atopic dermatitis patients treated with dupilumab-clinical characteristics and treatment. *J Allergy Clin Immunol Pract*. Sep-Oct 2018;6(5):1778-1780.e1. doi:10.1016/j.jaip.2018.01.034
300. Blauvelt A, de Bruin-Weller M, Gooderham M, et al. Long-term management of moderate-to-severe atopic dermatitis with dupilumab and concomitant topical corticosteroids (LIBERTY AD CHRONOS): a 1-year, randomised, double-blinded, placebo-controlled, phase 3 trial. *Lancet*. Jun 10 2017;389(10086):2287-2303. doi:10.1016/s0140-6736(17)31191-1
301. Guttman-Yassky E, Blauvelt A, Eichenfield LF, et al. Efficacy and Safety of Lebrikizumab, a High-Affinity Interleukin 13 Inhibitor, in Adults With Moderate to Severe Atopic Dermatitis: A Phase 2b Randomized Clinical Trial. *JAMA Dermatol*. Apr 1 2020;156(4):411-420. doi:10.1001/jamadermatol.2020.0079
302. Simpson EL, Flohr C, Eichenfield LF, et al. Efficacy and safety of lebrikizumab (an anti-IL-13 monoclonal antibody) in adults with moderate-to-severe atopic dermatitis inadequately controlled by topical corticosteroids: A randomized, placebo-controlled phase II trial (TREBLE). *Journal of the American Academy of Dermatology*. May 2018;78(5):863-871.e11. doi:10.1016/j.jaad.2018.01.017
303. Ruzicka T, Hanifin JM, Furue M, et al. Anti-Interleukin-31 Receptor A Antibody for Atopic Dermatitis. *N Engl J Med*. Mar 2 2017;376(9):826-835. doi:10.1056/NEJMoa1606490
304. Silverberg JI, Pinter A, Pulka G, et al. Phase 2B randomized study of nemolizumab in adults with moderate-to-severe atopic dermatitis and severe pruritus. *J Allergy Clin Immunol*. Jan 2020;145(1):173-182. doi:10.1016/j.jaci.2019.08.013
305. Silverberg JI, Pinter A, Alavi A, et al. Nemolizumab is associated with a rapid improvement in atopic dermatitis signs and symptoms: subpopulation (EASI \geq 16) analysis of randomized phase 2B study. *J Eur Acad Dermatol Venereol*. Jul 2021;35(7):1562-1568. doi:10.1111/jdv.17218
306. Kabashima K, Matsumura T, Komazaki H, Kawashima M. Trial of Nemolizumab and Topical Agents for Atopic Dermatitis with Pruritus. *N Engl J Med*. Jul 9 2020;383(2):141-150. doi:10.1056/NEJMoa1917006

307. Wollenberg A, Thomsen SF, Lacour J-P, Jaumont X, Lazarewicz S. Targeting immunoglobulin E in atopic dermatitis: A review of the existing evidence. *World Allergy Organization Journal*. 2021/03/01/ 2021;14(3):100519. doi:<https://doi.org/10.1016/j.waojou.2021.100519>
308. Metz M, Maurer M. Omalizumab in chronic urticaria. *Curr Opin Allergy Clin Immunol*. Aug 2012;12(4):406-11. doi:10.1097/ACI.0b013e328355365a
309. Bieber T, de la Salle H, Wollenberg A, et al. Human epidermal Langerhans cells express the high affinity receptor for immunoglobulin E (Fc epsilon RI). *J Exp Med*. May 1 1992;175(5):1285-90. doi:10.1084/jem.175.5.1285
310. Chan S, Cornelius V, Cro S, Harper JI, Lack G. Treatment Effect of Omalizumab on Severe Pediatric Atopic Dermatitis: The ADAPT Randomized Clinical Trial. *JAMA Pediatr*. Nov 25 2019;174(1):29-37. doi:10.1001/jamapediatrics.2019.4476
311. Belloni B, Ziai M, Lim A, et al. Low-dose anti-IgE therapy in patients with atopic eczema with high serum IgE levels. *J Allergy Clin Immunol*. Nov 2007;120(5):1223-5. doi:10.1016/j.jaci.2007.08.060
312. Wang HH, Li YC, Huang YC. Efficacy of omalizumab in patients with atopic dermatitis: A systematic review and meta-analysis. *J Allergy Clin Immunol*. Dec 2016;138(6):1719-1722.e1. doi:10.1016/j.jaci.2016.05.038
313. Corren J, Casale TB, Lanier B, Buhl R, Holgate S, Jimenez P. Safety and tolerability of omalizumab. *Clin Exp Allergy*. Jun 2009;39(6):788-97. doi:10.1111/j.1365-2222.2009.03214.x
314. Cruz AA, Lima F, Sarinho E, et al. Safety of anti-immunoglobulin E therapy with omalizumab in allergic patients at risk of geohelminth infection. *Clin Exp Allergy*. Feb 2007;37(2):197-207. doi:10.1111/j.1365-2222.2007.02650.x
315. Popovic B, Breed J, Rees DG, et al. Structural Characterisation Reveals Mechanism of IL-13-Neutralising Monoclonal Antibody Tralokinumab as Inhibition of Binding to IL-13R α 1 and IL-13R α 2. *J Mol Biol*. Jan 20 2017;429(2):208-219. doi:10.1016/j.jmb.2016.12.005
316. ClinicalTrials.gov. Tralokinumab Monotherapy for Adolescent Subjects With Moderate to Severe Atopic Dermatitis - ECZTRA 6 (ECZema TRAlokinumab Trial no. 6). 25.11.2022, Accessed 25.11.2022, <https://clinicaltrials.gov/ct2/show/results/NCT03526861?term=ECZTRA+6&draw=2&rank=1>
317. Silverberg JI, Toth D, Bieber T, et al. Tralokinumab plus topical corticosteroids for the treatment of moderate-to-severe atopic dermatitis: results from the double-blind, randomized, multicentre, placebo-controlled phase III ECZTRA 3 trial. *Br J Dermatol*. Mar 2021;184(3):450-463. doi:10.1111/bjd.19573
318. Solimani F, Meier K, Ghoreschi K. Emerging Topical and Systemic JAK Inhibitors in Dermatology. *Front Immunol*. 2019;10:2847. doi:10.3389/fimmu.2019.02847
319. Amano W, Nakajima S, Kunugi H, et al. The Janus kinase inhibitor JTE-052 improves skin barrier function through suppressing signal transducer and activator of transcription 3 signaling. *J Allergy Clin Immunol*. Sep 2015;136(3):667-677 e7. doi:10.1016/j.jaci.2015.03.051
320. Oetjen LK, Mack MR, Feng J, et al. Sensory Neurons Co-opt Classical Immune Signaling Pathways to Mediate Chronic Itch. *Cell*. Sep 21 2017;171(1):217-228 e13. doi:10.1016/j.cell.2017.08.006
321. Eichenfield LF, Flohr C, Sidbury R, et al. Efficacy and Safety of Abrocitinib in Combination With Topical Therapy in Adolescents With Moderate-to-Severe Atopic Dermatitis: The JADE TEEN Randomized Clinical Trial. *JAMA Dermatol*. Oct 1 2021;157(10):1165-1173. doi:10.1001/jamadermatol.2021.2830
322. Bieber T, Simpson EL, Silverberg JI, et al. Abrocitinib versus Placebo or Dupilumab for Atopic Dermatitis. *N Engl J Med*. Mar 25 2021;384(12):1101-1112. doi:10.1056/NEJMoa2019380
323. Blauvelt A, Silverberg JI, Lynde CW, et al. Abrocitinib induction, randomized withdrawal, and retreatment in patients with moderate-to-severe atopic dermatitis: Results from the JAK1 Atopic Dermatitis Efficacy and Safety (JADE) REGIMEN phase 3 trial. *Journal of the American Academy of Dermatology*. Aug 17 2021;(21)(S0190-9622):02343-4. doi:10.1016/j.jaad.2021.05.075

324. Simpson EL, Silverberg JI, Nosbaum A, et al. Integrated Safety Analysis of Abrocitinib for the Treatment of Moderate-to-Severe Atopic Dermatitis From the Phase II and Phase III Clinical Trial Program. *Am J Clin Dermatol*. Sep 2021;22(5):693-707. doi:10.1007/s40257-021-00618-3
325. Reich K, Kabashima K, Peris K, et al. Efficacy and Safety of Baricitinib Combined With Topical Corticosteroids for Treatment of Moderate to Severe Atopic Dermatitis: A Randomized Clinical Trial. *JAMA Dermatol*. Dec 1 2020;156(12):1333-1343. doi:10.1001/jamadermatol.2020.3260
326. Silverberg JI, Simpson EL, Wollenberg A, et al. Long-term Efficacy of Baricitinib in Adults With Moderate to Severe Atopic Dermatitis Who Were Treatment Responders or Partial Responders: An Extension Study of 2 Randomized Clinical Trials. *JAMA Dermatol*. Jun 1 2021;157(6):691-699. doi:10.1001/jamadermatol.2021.1273
327. A Study of Baricitinib (LY3009104) in Children and Adolescents With Atopic Dermatitis (BREEZE-AD-PEDS). 02.11.2021, 02.11.2021. <https://clinicaltrials.gov/ct2/show/NCT03952559>
328. Bieber T, Thyssen JP, Reich K, et al. Pooled safety analysis of baricitinib in adult patients with atopic dermatitis from 8 randomized clinical trials. *J Eur Acad Dermatol Venereol*. Sep 14 2020;doi:10.1111/jdv.16948
329. Taylor PC, Takeuchi T, Burmester GR, et al. Safety of baricitinib for the treatment of rheumatoid arthritis over a median of 4.6 and up to 9.3 years of treatment: final results from long-term extension study and integrated database. *Ann Rheum Dis*. Oct 27 2021;doi:10.1136/annrheumdis-2021-221276
330. Fleischmann R, Schiff M, van der Heijde D, et al. Baricitinib, Methotrexate, or Combination in Patients With Rheumatoid Arthritis and No or Limited Prior Disease-Modifying Antirheumatic Drug Treatment. *Arthritis Rheumatol*. Mar 2017;69(3):506-517. doi:10.1002/art.39953
331. Guttman-Yassky E, Thaci D, Pangan AL, et al. Upadacitinib in adults with moderate to severe atopic dermatitis: 16-week results from a randomized, placebo-controlled trial. *J Allergy Clin Immunol*. Mar 2020;145(3):877-884. doi:10.1016/j.jaci.2019.11.025
332. Reich K, Teixeira HD, de Bruin-Weller M, et al. Safety and efficacy of upadacitinib in combination with topical corticosteroids in adolescents and adults with moderate-to-severe atopic dermatitis (AD Up): results from a randomised, double-blind, placebo-controlled, phase 3 trial. *Lancet*. Jun 5 2021;397(10290):2169-2181. doi:10.1016/s0140-6736(21)00589-4
333. Silverberg JI, de Bruin-Weller M, Bieber T, et al. Upadacitinib plus topical corticosteroids in atopic dermatitis: Week 52 AD Up study results. *J Allergy Clin Immunol*. Aug 14 2021;doi:10.1016/j.jaci.2021.07.036
334. Katoh N, Ohya Y, Murota H, et al. A phase 3 randomized, multicenter, double-blind study to evaluate the safety of upadacitinib in combination with topical corticosteroids in adolescent and adult patients with moderate-to-severe atopic dermatitis in Japan (Rising Up): An interim 24-week analysis. *JAAD Int*. Mar 2022;6:27-36. doi:10.1016/j.jdin.2021.11.001
335. Fleischmann RM, Genovese MC, Enejosa JV, et al. Safety and effectiveness of upadacitinib or adalimumab plus methotrexate in patients with rheumatoid arthritis over 48 weeks with switch to alternate therapy in patients with insufficient response. *Ann Rheum Dis*. Nov 2019;78(11):1454-1462. doi:10.1136/annrheumdis-2019-215764
336. Blauvelt A, Teixeira HD, Simpson EL, et al. Efficacy and Safety of Upadacitinib vs Dupilumab in Adults With Moderate-to-Severe Atopic Dermatitis: A Randomized Clinical Trial. *JAMA Dermatol*. Sep 1 2021;157(9):1047-1055. doi:10.1001/jamadermatol.2021.3023
337. Ruzicka T, Lynde CW, Jemec GB, et al. Efficacy and safety of oral alitretinoin (9-cis retinoic acid) in patients with severe chronic hand eczema refractory to topical corticosteroids: results of a randomized, double-blind, placebo-controlled, multicentre trial. *Br J Dermatol*. Apr 2008;158(4):808-17. doi:10.1111/j.1365-2133.2008.08487.x
338. Grahovac M, Molin S, Prinz JC, Ruzicka T, Wollenberg A. Treatment of atopic eczema with oral alitretinoin. *Br J Dermatol*. Jan 2010;162(1):217-8. doi:10.1111/j.1365-2133.2009.09522.x

339. Luchsinger I, Vogler T, Schwieger-Briel A, et al. Safe and effective use of alitretinoin in children with recalcitrant hand eczema and other dermatoses - a retrospective analysis. *J Eur Acad Dermatol Venereol*. May 2020;34(5):1037-1042. doi:10.1111/jdv.16088
340. Murata Y, Song M, Kikuchi H, et al. Phase 2a, randomized, double-blind, placebo-controlled, multicenter, parallel-group study of a H4 R-antagonist (JNJ-39758979) in Japanese adults with moderate atopic dermatitis. *J Dermatol*. Feb 2015;42(2):129-39. doi:10.1111/1346-8138.12726
341. Werfel T, Layton G, Yeadon M, et al. Efficacy and safety of the histamine H(4) receptor antagonist ZPL-3893787 in patients with atopic dermatitis. *J Allergy Clin Immunol*. May 2019;143(5):1830-1837.e4. doi:10.1016/j.jaci.2018.07.047
342. Werfel T, Heratizadeh A, Niebuhr M, et al. Exacerbation of atopic dermatitis on grass pollen exposure in an environmental challenge chamber. *J Allergy Clin Immunol*. Jul 2015;136(1):96-103.e9. doi:10.1016/j.jaci.2015.04.015
343. Garritsen FM, ter Haar NM, Spuls PI. House dust mite reduction in the management of atopic dermatitis. A critically appraised topic. *Br J Dermatol*. Apr 2013;168(4):688-91. doi:10.1111/bjd.12283
344. Nankervis H, Pynn EV, Boyle RJ, et al. House dust mite reduction and avoidance measures for treating eczema. *Cochrane Database Syst Rev*. Jan 19 2015;1:Cd008426. doi:10.1002/14651858.CD008426.pub2
345. Fieten KB, Weststrate AC, van Zuuren EJ, Bruijnzeel-Koomen CA, Pasmans SG. Alpine climate treatment of atopic dermatitis: a systematic review. *Allergy*. Jan 2015;70(1):12-25. doi:10.1111/all.12514
346. Thorsteinsdottir S, Thyssen JP, Stokholm J, Vissing NH, Waage J, Bisgaard H. Domestic dog exposure at birth reduces the incidence of atopic dermatitis. *Allergy*. Dec 2016;71(12):1736-1744. doi:10.1111/all.12980
347. Pelucchi C, Galeone C, Bach JF, La Vecchia C, Chatenoud L. Pet exposure and risk of atopic dermatitis at the pediatric age: a meta-analysis of birth cohort studies. *J Allergy Clin Immunol*. Sep 2013;132(3):616-622.e7. doi:10.1016/j.jaci.2013.04.009
348. Kim A, Silverberg JL. A systematic review of vigorous physical activity in eczema. *Br J Dermatol*. Mar 2016;174(3):660-2. doi:10.1111/bjd.14179
349. Murota H, Yamaga K, Ono E, Katayama I. Sweat in the pathogenesis of atopic dermatitis. *Allergol Int*. Oct 2018;67(4):455-459. doi:10.1016/j.alit.2018.06.003
350. Murota H, Yamaga K, Ono E, Murayama N, Yokozeki H, Katayama I. Why does sweat lead to the development of itch in atopic dermatitis? *Exp Dermatol*. Dec 2019;28(12):1416-1421. doi:10.1111/exd.13981
351. Jaros J, Wilson C, Shi VY. Fabric Selection in Atopic Dermatitis: An Evidence-Based Review. *Am J Clin Dermatol*. May 21 2020;doi:10.1007/s40257-020-00516-0
352. Lopes C, Silva D, Delgado L, Correia O, Moreira A. Functional textiles for atopic dermatitis: a systematic review and meta-analysis. *Pediatr Allergy Immunol*. Sep 2013;24(6):603-13. doi:10.1111/pai.12111
353. Bao Q, Chen L, Lu Z, et al. Association between eczema and risk of depression: A systematic review and meta-analysis of 188,495 participants. *J Affect Disord*. Oct 1 2018;238:458-464. doi:10.1016/j.jad.2018.05.007
354. Ronnstad ATM, Halling-Overgaard AS, Hamann CR, Skov L, Egeberg A, Thyssen JP. Association of atopic dermatitis with depression, anxiety, and suicidal ideation in children and adults: A systematic review and meta-analysis. *Journal of the American Academy of Dermatology*. Sep 2018;79(3):448-456 e30. doi:10.1016/j.jaad.2018.03.017
355. Chan CWH, Law BMH, Liu YH, et al. The Association between Maternal Stress and Childhood Eczema: A Systematic Review. *Int J Environ Res Public Health*. Feb 25 2018;15(3)doi:10.3390/ijerph15030395

356. Flanigan C, Sheikh A, DunnGalvin A, Brew BK, Almqvist C, Nwaru BI. Prenatal maternal psychosocial stress and offspring's asthma and allergic disease: A systematic review and meta-analysis. *Clin Exp Allergy*. Apr 2018;48(4):403-414. doi:10.1111/cea.13091
357. Mochizuki H, Lavery MJ, Nattkemper LA, et al. Impact of acute stress on itch sensation and scratching behaviour in patients with atopic dermatitis and healthy controls. *Br J Dermatol*. Apr 2019;180(4):821-827. doi:10.1111/bjd.16921
358. Oh SH, Bae BG, Park CO, et al. Association of stress with symptoms of atopic dermatitis. *Acta Derm Venereol*. Nov 2010;90(6):582-8. doi:10.2340/00015555-0933
359. Ngoc LTN, Park D, Lee Y, Lee YC. Systematic Review and Meta-Analysis of Human Skin Diseases Due to Particulate Matter. *Int J Environ Res Public Health*. Nov 25 2017;14(12)doi:10.3390/ijerph14121458
360. Kramer U, Behrendt H. [Air pollution and atopic eczema : Systematic review of findings from environmental epidemiological studies]. *Hautarzt*. Mar 2019;70(3):169-184. Luftverschmutzung und atopisches Ekzem : Systematisches Review der Erkenntnisse aus umweltepidemiologischen Studien. doi:10.1007/s00105-018-4330-3
361. Yazd NKK, Dunnick, C. Environmental Risk Factors for Development of Atopic Dermatitis: a Systematic Review. *Curr Derm Rep* 2017;6:169–177doi:<https://doi.org/10.1007/s13671-017-0189-2>
362. Kantor R, Kim A, Thyssen JP, Silverberg JI. Association of atopic dermatitis with smoking: A systematic review and meta-analysis. *Journal of the American Academy of Dermatology*. Dec 2016;75(6):1119-1125 e1. doi:10.1016/j.jaad.2016.07.017
363. Pilz AC, Schielein MC, Schuster B, et al. Atopic dermatitis: disease characteristics and comorbidities in smoking and non-smoking patients from the TREATgermany registry. *J Eur Acad Dermatol Venereol*. Mar 2022;36(3):413-421. doi:10.1111/jdv.17789
364. Tsakok T, Marrs T, Mohsin M, et al. Does atopic dermatitis cause food allergy? A systematic review. *J Allergy Clin Immunol*. Apr 2016;137(4):1071-1078. doi:10.1016/j.jaci.2015.10.049
365. Eigenmann PA, Sicherer SH, Borkowski TA, Cohen BA, Sampson HA. Prevalence of IgE-mediated food allergy among children with atopic dermatitis. *Pediatrics*. Mar 1998;101(3):E8. doi:10.1542/peds.101.3.e8
366. Sicherer SH, Sampson HA. Food hypersensitivity and atopic dermatitis: pathophysiology, epidemiology, diagnosis, and management. *J Allergy Clin Immunol*. Sep 1999;104(3 Pt 2):S114-22. doi:10.1016/s0091-6749(99)70053-9
367. Breuer K, Heratizadeh A, Wulf A, et al. Late eczematous reactions to food in children with atopic dermatitis. *Clin Exp Allergy*. May 2004;34(5):817-24. doi:10.1111/j.1365-2222.2004.1953.x
368. Reekers R, Busche M, Wittmann M, Kapp A, Werfel T. Birch pollen-related foods trigger atopic dermatitis in patients with specific cutaneous T-cell responses to birch pollen antigens. *J Allergy Clin Immunol*. Aug 1999;104(2 Pt 1):466-72. doi:10.1016/s0091-6749(99)70395-7
369. Wassmann-Otto A, Heratizadeh A, Wichmann K, Werfel T. Birch pollen-related foods can cause late eczematous reactions in patients with atopic dermatitis. *Allergy*. Oct 2018;73(10):2046-2054. doi:10.1111/all.13454
370. Breuer K, Wulf A, Constien A, Tetau D, Kapp A, Werfel T. Birch pollen-related food as a provocation factor of allergic symptoms in children with atopic eczema/dermatitis syndrome. *Allergy*. Sep 2004;59(9):988-94. doi:10.1111/j.1398-9995.2004.00493.x
371. Sampson HA. The evaluation and management of food allergy in atopic dermatitis. *Clinics in dermatology*. May-Jun 2003;21(3):183-92. doi:10.1016/s0738-081x(02)00363-2
372. Werfel T, Ballmer-Weber B, Eigenmann PA, et al. Eczematous reactions to food in atopic eczema: position paper of the EAACI and GA2LEN. *Allergy*. Jul 2007;62(7):723-8. doi:10.1111/j.1398-9995.2007.01429.x
373. Muraro A, Werfel T, Hoffmann-Sommergruber K, et al. EAACI food allergy and anaphylaxis guidelines: diagnosis and management of food allergy. *Allergy*. Aug 2014;69(8):1008-25. doi:10.1111/all.12429

374. Niggemann B, Reibel S, Wahn U. The atopy patch test (APT)-- a useful tool for the diagnosis of food allergy in children with atopic dermatitis. *Allergy*. Mar 2000;55(3):281-5. doi:10.1034/j.1398-9995.2000.00464.x
375. Turjanmaa K, Darsow U, Niggemann B, Rancé F, Vanto T, Werfel T. EAACI/GA2LEN position paper: present status of the atopy patch test. *Allergy*. Dec 2006;61(12):1377-84. doi:10.1111/j.1398-9995.2006.01136.x
376. Niggemann B. The role of the atopy patch test (APT) in diagnosis of food allergy in infants and children with atopic dermatitis. *Pediatr Allergy Immunol*. 2001;12 Suppl 14:37-40. doi:10.1034/j.1399-3038.2001.121408.x
377. Roehr CC, Reibel S, Ziegert M, Sommerfeld C, Wahn U, Niggemann B. Atopy patch tests, together with determination of specific IgE levels, reduce the need for oral food challenges in children with atopic dermatitis. *J Allergy Clin Immunol*. Mar 2001;107(3):548-53. doi:10.1067/mai.2001.112849
378. Darsow U, Ring J. Airborne and dietary allergens in atopic eczema: a comprehensive review of diagnostic tests. *Clin Exp Dermatol*. Oct 2000;25(7):544-51. doi:10.1046/j.1365-2230.2000.00695.x
379. Bindslev-Jensen C, Ballmer-Weber BK, Bengtsson U, et al. Standardization of food challenges in patients with immediate reactions to foods--position paper from the European Academy of Allergology and Clinical Immunology. *Allergy*. Jul 2004;59(7):690-7. doi:10.1111/j.1398-9995.2004.00466.x
380. Hoare C, Li Wan Po A, Williams H. Systematic review of treatments for atopic eczema. *Health Technol Assess*. 2000;4(37):1-191.
381. Bath-Hextall F, Delamere FM, Williams HC. Dietary exclusions for improving established atopic eczema in adults and children: systematic review. *Allergy*. Feb 2009;64(2):258-64. doi:10.1111/j.1398-9995.2008.01917.x
382. Hanifin JM, Cooper KD, Ho VC, et al. Guidelines of care for atopic dermatitis, developed in accordance with the American Academy of Dermatology (AAD)/American Academy of Dermatology Association "Administrative Regulations for Evidence-Based Clinical Practice Guidelines". *Journal of the American Academy of Dermatology*. Mar 2004;50(3):391-404. doi:10.1016/j.jaad.2003.08.003
383. Isolauri E, Arvola T, Sütas Y, Moilanen E, Salminen S. Probiotics in the management of atopic eczema. *Clin Exp Allergy*. Nov 2000;30(11):1604-10. doi:10.1046/j.1365-2222.2000.00943.x
384. Fölster-Holst R, Müller F, Schnopp N, et al. Prospective, randomized controlled trial on Lactobacillus rhamnosus in infants with moderate to severe atopic dermatitis. *Br J Dermatol*. Dec 2006;155(6):1256-61. doi:10.1111/j.1365-2133.2006.07558.x
385. Rosenfeldt V, Benfeldt E, Nielsen SD, et al. Effect of probiotic Lactobacillus strains in children with atopic dermatitis. *J Allergy Clin Immunol*. Feb 2003;111(2):389-95. doi:10.1067/mai.2003.389
386. Grüber C. Probiotics and prebiotics in allergy prevention and treatment: future prospects. *Expert review of clinical immunology*. Jan 2012;8(1):17-9. doi:10.1586/eci.11.74
387. Makrgeorgou A, Leonardi-Bee J, Bath-Hextall FJ, et al. Probiotics for treating eczema. *Cochrane Database Syst Rev*. Nov 21 2018;11(11):Cd006135. doi:10.1002/14651858.CD006135.pub3
388. Tan-Lim CSC, Esteban-Ipac NAR, Mantaring JBV, 3rd, et al. Comparative effectiveness of probiotic strains for the treatment of pediatric atopic dermatitis: A systematic review and network meta-analysis. *Pediatr Allergy Immunol*. Jun 10 2020;doi:10.1111/pai.13305
389. Bath-Hextall FJ, Jenkinson C, Humphreys R, Williams HC. Dietary supplements for established atopic eczema. *Cochrane Database Syst Rev*. Feb 15 2012;(2):Cd005205. doi:10.1002/14651858.CD005205.pub3
390. Aldaghi M, Tehrani H, Karrabi M, Abadi FS, Sahebkar M. The effect of multistrain synbiotic and vitamin D3 supplements on the severity of atopic dermatitis among infants under 1 year of age: a double-blind, randomized clinical trial study. *J Dermatolog Treat*. Jun 26 2020:1-6. doi:10.1080/09546634.2020.1782319

391. Udompataikul M, Srisatwaja W. Comparative trial of moisturizer containing licochalcone A vs. hydrocortisone lotion in the treatment of childhood atopic dermatitis: a pilot study. *J Eur Acad Dermatol Venereol*. Jun 2011;25(6):660-5. doi:10.1111/j.1468-3083.2010.03845.x
392. Fortes C, Mastroeni S, Mannooranparampil TJ, Di Lallo D. Pre-natal folic acid and iron supplementation and atopic dermatitis in the first 6 years of life. *Arch Dermatol Res*. Jul 2019;311(5):361-367. doi:10.1007/s00403-019-01911-2
393. Kucuksezer UC, Ozdemir C, Cevhertas L, Ogulur I, Akdis M, Akdis CA. Mechanisms of allergen-specific immunotherapy and allergen tolerance. *Allergol Int*. Oct 2020;69(4):549-560. doi:10.1016/j.alit.2020.08.002
394. Noon L. PROPHYLACTIC INOCULATION AGAINST HAY FEVER. *The Lancet*. 1911/06/10/1911;177(4580):1572-1573. doi:[https://doi.org/10.1016/S0140-6736\(00\)78276-6](https://doi.org/10.1016/S0140-6736(00)78276-6)
395. Cox LS, Hankin C, Lockey R. Allergy immunotherapy adherence and delivery route: location does not matter. *J Allergy Clin Immunol Pract*. Mar-Apr 2014;2(2):156-60. doi:10.1016/j.jaip.2014.01.010
396. Novak N, Bieber T, Hoffmann M, et al. Efficacy and safety of subcutaneous allergen-specific immunotherapy with depigmented polymerized mite extract in atopic dermatitis. *J Allergy Clin Immunol*. Oct 2012;130(4):925-31.e4. doi:10.1016/j.jaci.2012.08.004
397. Novak N. Allergen specific immunotherapy for atopic dermatitis. *Curr Opin Allergy Clin Immunol*. Dec 2007;7(6):542-46. doi:10.1097/ACI.0b013e3282f1d66c
398. Bae JM, Choi YY, Park CO, Chung KY, Lee KH. Efficacy of allergen-specific immunotherapy for atopic dermatitis: a systematic review and meta-analysis of randomized controlled trials. *J Allergy Clin Immunol*. Jul 2013;132(1):110-7. doi:10.1016/j.jaci.2013.02.044
399. Gendelman SR, Lang DM. Specific immunotherapy in the treatment of atopic dermatitis: a systematic review using the GRADE system. *Ann Allergy Asthma Immunol*. Dec 2013;111(6):555-61. doi:10.1016/j.anai.2013.08.020
400. Hajdu K, Kapitány A, Dajnoki Z, et al. Improvement of clinical and immunological parameters after allergen-specific immunotherapy in atopic dermatitis. *J Eur Acad Dermatol Venereol*. Jun 2021;35(6):1357-1361. doi:10.1111/jdv.17018
401. Tam H, Calderon MA, Manikam L, et al. Specific allergen immunotherapy for the treatment of atopic eczema. *Cochrane Database Syst Rev*. Feb 12 2016;2:CD008774. doi:10.1002/14651858.CD008774.pub2
402. Ridolo E, Martignago I, Riario-Sforza GG, Incorvaia C. Allergen immunotherapy in atopic dermatitis. *Expert review of clinical immunology*. Jan 2018;14(1):61-68. doi:10.1080/1744666x.2018.1401469
403. Tan EK, Millington GW, Levell NJ. Acupuncture in dermatology: an historical perspective. *International journal of dermatology*. Jun 2009;48(6):648-52. doi:10.1111/j.1365-4632.2009.03899.x
404. Langevin HM, Churchill DL, Cipolla MJ. Mechanical signaling through connective tissue: a mechanism for the therapeutic effect of acupuncture. *Faseb j*. Oct 2001;15(12):2275-82. doi:10.1096/fj.01-0015hyp
405. Pfab F, Athanasiadis GI, Huss-Marp J, et al. Effect of acupuncture on allergen-induced basophil activation in patients with atopic eczema: a pilot trial. *J Altern Complement Med*. Apr 2011;17(4):309-14. doi:10.1089/acm.2009.0684
406. Pfab F, Huss-Marp J, Gatti A, et al. Influence of acupuncture on type I hypersensitivity itch and the wheal and flare response in adults with atopic eczema - a blinded, randomized, placebo-controlled, crossover trial. *Allergy*. Jul 2010;65(7):903-10. doi:10.1111/j.1398-9995.2009.02284.x
407. Jiao R, Yang Z, Wang Y, Zhou J, Zeng Y, Liu Z. The effectiveness and safety of acupuncture for patients with atopic eczema: a systematic review and meta-analysis. *Acupunct Med*. Feb 2020;38(1):3-14. doi:10.1177/0964528419871058
408. Beretta S, Fabiano V, Petruzzi M, Budelli A, Zuccotti GV. Fermented rice flour in pediatric atopic dermatitis. *Dermatitis*. Mar-Apr 2015;26(2):104-6. doi:10.1097/der.000000000000103

409. Sgouros D, Katoulis A, Rigopoulos D. Novel topical agent containing superoxide dismutase 100 000 IU and 4% of plant extracts as a mono-therapy for atopic dermatitis. *J Cosmet Dermatol*. Dec 2018;17(6):1069-1072. doi:10.1111/jocd.12462
410. Abbasi S, Kamalinejad M, Babaie D, et al. A new topical treatment of atopic dermatitis in pediatric patients based on *Ficus carica* L. (Fig): A randomized, placebo-controlled clinical trial. *Complement Ther Med*. Dec 2017;35:85-91. doi:10.1016/j.ctim.2017.10.003
411. Hon KL, Tsang YC, Pong NH, et al. Patient acceptability, efficacy, and skin biophysiology of a cream and cleanser containing lipid complex with shea butter extract versus a ceramide product for eczema. *Hong Kong Med J*. Oct 2015;21(5):417-25. doi:10.12809/hkmj144472
412. Ernst E. Adverse effects of herbal drugs in dermatology. *Br J Dermatol*. Nov 2000;143(5):923-9. doi:10.1046/j.1365-2133.2000.03822.x
413. Cho SM, Kim ME, Kim JY, Park JC, Nahm DH. Clinical efficacy of autologous plasma therapy for atopic dermatitis. *Dermatology*. 2014;228(1):71-7. doi:10.1159/000356387
414. Cho SM, Kim ME, Kwon B, Nahm DH. Immunomodulatory effects induced by intramuscular administration of autologous total immunoglobulin G in patients with atopic dermatitis. *Int Immunopharmacol*. Nov 2017;52:1-6. doi:10.1016/j.intimp.2017.08.020
415. Nahm DH, Ahn A, Kim ME, Cho SM, Park MJ. Autologous Immunoglobulin Therapy in Patients With Severe Recalcitrant Atopic Dermatitis: Long-Term Changes of Clinical Severity and Laboratory Parameters. *Allergy Asthma Immunol Res*. Jul 2016;8(4):375-82. doi:10.4168/aaair.2016.8.4.375
416. Gu S, Yang AW, Li CG, Lu C, Xue CC. Topical application of Chinese herbal medicine for atopic eczema: a systematic review with a meta-analysis. *Dermatology*. 2014;228(4):294-302. doi:10.1159/000360526
417. Gu S, Yang AW, Xue CC, et al. Chinese herbal medicine for atopic eczema. *Cochrane Database Syst Rev*. Sep 10 2013;(9):Cd008642. doi:10.1002/14651858.CD008642.pub2
418. Eberlein B, Huss-Marp J, Pfab F, et al. Influence of alpine mountain climate of Bavaria on patients with atopic diseases: studies at the Environmental Research Station Schneesfernerhaus (UFS - Zugspitze) - a pilot study. *Clin Transl Allergy*. 2014;4:17. doi:10.1186/2045-7022-4-17
419. Senra MS, Wollenberg A. Psychodermatological aspects of atopic dermatitis. *Br J Dermatol*. Jul 2014;170 Suppl 1:38-43. doi:10.1111/bjd.13084
420. Rønnstad ATM, Halling-Overgaard AS, Hamann CR, Skov L, Egeberg A, Thyssen JP. Association of atopic dermatitis with depression, anxiety, and suicidal ideation in children and adults: A systematic review and meta-analysis. *Journal of the American Academy of Dermatology*. Sep 2018;79(3):448-456.e30. doi:10.1016/j.jaad.2018.03.017
421. Eicher L, Knop M, Aszodi N, Senner S, French LE, Wollenberg A. A systematic review of factors influencing treatment adherence in chronic inflammatory skin disease - strategies for optimizing treatment outcome. *J Eur Acad Dermatol Venereol*. Dec 2019;33(12):2253-2263. doi:10.1111/jdv.15913
422. Stalder JF, Bernier C, Ball A, et al. Therapeutic patient education in atopic dermatitis: worldwide experiences. *Pediatr Dermatol*. May-Jun 2013;30(3):329-34. doi:10.1111/pde.12024
423. de Bes J, Legierse CM, Prinsen CA, de Korte J. Patient education in chronic skin diseases: a systematic review. *Acta Derm Venereol*. Jan 2011;91(1):12-7. doi:10.2340/00015555-1022
424. Ersser SJ, Cowdell F, Latter S, et al. Psychological and educational interventions for atopic eczema in children. *Cochrane Database Syst Rev*. Jan 7 2014;2014(1):Cd004054. doi:10.1002/14651858.CD004054.pub3
425. Zhao M, Liang Y, Shen C, Wang Y, Ma L, Ma X. Patient Education Programs in Pediatric Atopic Dermatitis: A Systematic Review of Randomized Controlled Trials and Meta-Analysis. *Dermatol Ther (Heidelb)*. Jun 2020;10(3):449-464. doi:10.1007/s13555-020-00365-z
426. Ridd MJ, King AJL, Le Roux E, Waldecker A, Huntley AL. Systematic review of self-management interventions for people with eczema. *Br J Dermatol*. Sep 2017;177(3):719-734. doi:10.1111/bjd.15601

427. Heratizadeh A, Werfel T, Wollenberg A, et al. Effects of structured patient education in adults with atopic dermatitis: Multicenter randomized controlled trial. *J Allergy Clin Immunol*. Sep 2017;140(3):845-853.e3. doi:10.1016/j.jaci.2017.01.029
428. Gradwell C, Thomas KS, English JS, Williams HC. A randomized controlled trial of nurse follow-up clinics: do they help patients and do they free up consultants' time? *Br J Dermatol*. Sep 2002;147(3):513-7. doi:10.1046/j.1365-2133.2002.04901.x
429. Chida Y, Steptoe A, Hirakawa N, Sudo N, Kubo C. The Effects of Psychological Intervention on Atopic Dermatitis. *International Archives of Allergy and Immunology*. 2007;144(1):1-9. doi:10.1159/000101940
430. Hamann CR, Egeberg A, Wollenberg A, Gislason G, Skov L, Thyssen JP. Pregnancy complications, treatment characteristics and birth outcomes in women with atopic dermatitis in Denmark. *J Eur Acad Dermatol Venereol*. Mar 2019;33(3):577-587. doi:10.1111/jdv.15256
431. Chi CC, Wang SH, Wojnarowska F, Kirtschig G, Davies E, Bennett C. Safety of topical corticosteroids in pregnancy. *Cochrane Database Syst Rev*. Oct 26 2015;(10):Cd007346. doi:10.1002/14651858.CD007346.pub3
432. Agency EM. Neoral Soft Gelatin Capsules - Summary of Product Characteristics (SmPC) - (emc). In).
433. Williams HC. Clinical practice. Atopic dermatitis. *N Engl J Med*. Jun 2 2005;352(22):2314-24. doi:10.1056/NEJMc042803
434. Rudikoff D, Cohen SR, Scheinfeld N. *Clinical aspects and differential diagnosis of atopic dermatitis*. In: *Atopic dermatitis and eczematous disorders*. CRC Press; 2014.
435. Marrs T, Perkin MR, Logan K, et al. Bathing frequency is associated with skin barrier dysfunction and atopic dermatitis at three months of age. *J Allergy Clin Immunol Pract*. Sep 2020;8(8):2820-2822. doi:10.1016/j.jaip.2020.04.043
436. Ruff SMD, Engebretsen KA, Zachariae C, et al. The association between atopic dermatitis and hand eczema: a systematic review and meta-analysis. *British Journal of Dermatology*. Apr 2018;178(4):879-888. doi:10.1111/bjd.16147
437. Nørreslet LB, Ebbelhøj NE, Ellekilde Bonde JP, Thomsen SF, Agner T. The impact of atopic dermatitis on work life - a systematic review. *J Eur Acad Dermatol Venereol*. Jan 2018;32(1):23-38. doi:10.1111/jdv.14523
438. Bregnhøj A, Sosted H, Menne T, Johansen JD. Healthy worker effect in hairdressing apprentices. *Contact Dermatitis*. Feb 2011;64(2):80-4. doi:10.1111/j.1600-0536.2010.01831.x
439. Wei J, Gerlich J, Vogelberg C, et al. Do young adults with atopic dermatitis avoid harmful workplace exposure at their first job? A prospective cohort study. *International archives of occupational and environmental health*. Apr 2016;89(3):397-406. doi:10.1007/s00420-015-1078-2
440. Nyrén M, Lindberg M, Stenberg B, Svensson M, Svensson A, Meding B. Influence of childhood atopic dermatitis on future worklife. *Scandinavian journal of work, environment & health*. Dec 2005;31(6):474-8. doi:10.5271/sjweh.952
441. Holm EA, Esmann S, Jemec GB. The handicap caused by atopic dermatitis--sick leave and job avoidance. *J Eur Acad Dermatol Venereol*. Mar 2006;20(3):255-9. doi:10.1111/j.1468-3083.2006.01416.x
442. Bandier J, Ross-Hansen K, Carlsen BC, et al. Carriers of filaggrin gene (FLG) mutations avoid professional exposure to irritants in adulthood. *Contact Dermatitis*. Dec 2013;69(6):355-62. doi:10.1111/cod.12097
443. Lammintausta K, Kalimo K. Does a patient's occupation influence the course of atopic dermatitis? *Acta Derm Venereol*. Apr 1993;73(2):119-22. doi:10.2340/0001555573119122
444. Whiteley J, Emir B, Seitzman R, Makinson G. The burden of atopic dermatitis in US adults: results from the 2013 National Health and Wellness Survey. *Curr Med Res Opin*. Oct 2016;32(10):1645-1651. doi:10.1080/03007995.2016.1195733
445. Fowler JF, Duh MS, Rovba L, et al. The direct and indirect cost burden of atopic dermatitis: an employer-payer perspective. *Manag Care Interface*. Oct 2007;20(10):26-32.

446. Zuberbier T, Orlow SJ, Paller AS, et al. Patient perspectives on the management of atopic dermatitis. *J Allergy Clin Immunol*. Jul 2006;118(1):226-32. doi:10.1016/j.jaci.2006.02.031
447. Fivenson D, Arnold RJ, Kaniecki DJ, Cohen JL, Frech F, Finlay AY. The effect of atopic dermatitis on total burden of illness and quality of life on adults and children in a large managed care organization. *J Manag Care Pharm*. Sep-Oct 2002;8(5):333-42. doi:10.18553/jmcp.2002.8.5.333
448. van Os-Medendorp H, Appelman-Noordermeer S, Bruijnzeel-Koomen C, de Bruin-Weller M. Sick Leave and Factors Influencing Sick Leave in Adult Patients with Atopic Dermatitis: A Cross-Sectional Study. *J Clin Med*. Mar 27 2015;4(4):535-47. doi:10.3390/jcm4040535
449. Yano C, Saeki H, Ishiji T, et al. Impact of disease severity on work productivity and activity impairment in Japanese patients with atopic dermatitis. *J Dermatol*. Sep 2013;40(9):736-9. doi:10.1111/1346-8138.12220
450. Ibler KS, Jemec GB. Permanent disability pension due to skin diseases in Denmark 2003-2008. *Acta Dermatovenerol Croat*. 2011;19(3):161-4.
451. Landeck L, Visser M, Skudlik C, Brans R, Kezic S, John SM. Clinical course of occupational irritant contact dermatitis of the hands in relation to filaggrin genotype status and atopy. *Br J Dermatol*. Dec 2012;167(6):1302-9. doi:10.1111/bjd.12035
452. Malkonen T, Alanko K, Jolanki R, et al. Long-term follow-up study of occupational hand eczema. *Br J Dermatol*. Nov 2010;163(5):999-1006. doi:10.1111/j.1365-2133.2010.09987.x
453. Agner T, Andersen KE, Brandao FM, et al. Contact sensitisation in hand eczema patients--relation to subdiagnosis, severity and quality of life: a multi-centre study. *Contact Dermatitis*. Nov 2009;61(5):291-6. doi:10.1111/j.1600-0536.2009.01630.x
454. Lerbaek A, Kyvik KO, Ravn H, Menne T, Agner T. Clinical characteristics and consequences of hand eczema - an 8-year follow-up study of a population-based twin cohort. *Contact Dermatitis*. Apr 2008;58(4):210-6. doi:10.1111/j.1600-0536.2007.01305.x
455. Meding B, Lantto R, Lindahl G, Wrangsjö K, Bengtsson B. Occupational skin disease in Sweden--a 12-year follow-up. *Contact Dermatitis*. Dec 2005;53(6):308-13. doi:10.1111/j.0105-1873.2005.00731.x
456. Cvetkovski RS, Rothman KJ, Olsen J, et al. Relation between diagnoses on severity, sick leave and loss of job among patients with occupational hand eczema. *Br J Dermatol*. Jan 2005;152(1):93-8. doi:10.1111/j.1365-2133.2005.06415.x
457. Dickel H, Bruckner TM, Schmidt A, Diepgen TL. Impact of atopic skin diathesis on occupational skin disease incidence in a working population. *J Invest Dermatol*. Jul 2003;121(1):37-40. doi:10.1046/j.1523-1747.2003.12323.x
458. Holm JO, Veierød MB. An epidemiological study of hand eczema. III. Characterization of hairdressers with and without hand eczema, regarding demographic factors and medical histories. *Acta Derm Venereol Suppl (Stockh)*. 1994;187:15-7.
459. Lysdal SH, Sosted H, Andersen KE, Johansen JD. Hand eczema in hairdressers: a Danish register-based study of the prevalence of hand eczema and its career consequences. *Contact Dermatitis*. Sep 2011;65(3):151-8. doi:10.1111/j.1600-0536.2011.01935.x
460. Cvetkovski RS, Zachariae R, Jensen H, Olsen J, Johansen JD, Agner T. Prognosis of occupational hand eczema: a follow-up study. *Arch Dermatol*. Mar 2006;142(3):305-11. doi:10.1001/archderm.142.3.305
461. Eckert L, Gupta S, Amand C, Gadkari A, Mahajan P, Gelfand JM. Impact of atopic dermatitis on health-related quality of life and productivity in adults in the United States: An analysis using the National Health and Wellness Survey. *Journal of the American Academy of Dermatology*. Aug 2017;77(2):274-279.e3. doi:10.1016/j.jaad.2017.04.019
462. Eckert L, Gupta S, Gadkari A, Mahajan P, Gelfand JM. Burden of illness in adults with atopic dermatitis: Analysis of National Health and Wellness Survey data from France, Germany, Italy, Spain, and the United Kingdom. *Journal of the American Academy of Dermatology*. Jul 2019;81(1):187-195. doi:10.1016/j.jaad.2019.03.037

463. Ariëns LFM, van Nimwegen KJM, Shams M, et al. Economic Burden of Adult Patients with Moderate to Severe Atopic Dermatitis Indicated for Systemic Treatment. *Acta Derm Venereol.* Jul 1 2019;99(9):762-768. doi:10.2340/00015555-3212
464. Kwak Y, Kim Y. Associations between prevalence of adult atopic dermatitis and occupational characteristics. *International journal of nursing practice.* Aug 2017;23(4)doi:10.1111/ijn.12554
465. Theodosiou G, Montgomery S, Metsini A, Dalgard FJ, Svensson A, Kobyletzki LB. Burden of Atopic Dermatitis in Swedish Adults: A Population-based Study. *Acta Derm Venereol.* Oct 1 2019;99(11):964-970. doi:10.2340/00015555-3257
466. Arima K, Gupta S, Gadkari A, et al. Burden of atopic dermatitis in Japanese adults: Analysis of data from the 2013 National Health and Wellness Survey. *J Dermatol.* Apr 2018;45(4):390-396. doi:10.1111/1346-8138.14218
467. Frimat P, Boughattas W, Even D. Atopic dermatitis: professional orientation. *Eur J Dermatol.* Jan-Feb 2015;25(1):3-6. doi:10.1684/ejd.2014.2480
468. Apfelbacher CJ, Radulescu M, Diepgen TL, Funke U. Occurrence and prognosis of hand eczema in the car industry: results from the PACO follow-up study (PACO II). *Contact Dermatitis.* Jun 2008;58(6):322-9. doi:10.1111/j.1600-0536.2008.01329.x
469. Radon K, Nowak D, Vogelberg C, Rueff F. Career Advice for Young Allergy Patients. *Dtsch Arztebl Int.* Aug 8 2016;113(31-32):519-24. doi:10.3238/arztebl.2016.0519